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AN ECONOMIC HISTORY
OF THE CORK REGION
IN THE EIGHTEENTH CENTURY

PART 2
The framework of agricultural assembly was a demand-driven in eighteenth-century practices with taxes in subsequent changes. Such key variations in regulatory settlements, from land, the volume of production and output, and prices cannot be measured satisfactorily. For example, there are a wealth of information about natural resources, but the danger of equating iron with the latter, which will always be apparent. Furthermore, the two major indicators of agricultural surplus and exports do not bear a constant relationship to output even if the same/output cycle has not been misleading. Rent would only be a measure of the value of output, not its volume or valuation. And the record of exports is more than a measure of output; it also effects the growth of Cork as the through-port for the products of other regions.

In addition, most trade data is based on foreign and legitimate traffic; the smuggling, even though it is partly important, is not included. Inland and coastal traffic (including the main commodity) can only be partially documented. Yet this long-term growth of both trade and regional surplus, despite the underlying dynamic character of agriculture; a three-fold growth in trade has been suggested. Export exports; from 1791 to 1835, the exports from the region reached the end of the century were almost three times the volume leaving Cork ports near the beginning.

From the time of Payne's propaganda for the agriculture in 1840, in addition observers stressed the suitability of south Munster, the geologists of the climate and the fertility of its soils. In fact, claims about climate were more accurate than those about soil. For the region's mild winters and mild summers are striking, as by Irish standards, they have ensured the long-term dominance of grassland farming.

The framework of agricultural activity and its development over the eighteenth century presents problems quite absent in subsequent periods. Such key variables as population, settlement, farm size, the volume and composition of output, and yields cannot be measured satisfactorily. For example, there may be a wealth of information about estate practices, but the danger of equating farm size with the letting unit will already be apparent. Furthermore the two proxy indicators of agricultural surplus — rent and exports — do not bear a constant relationship to output; even if the rent/output ratio had been unchanging, rent would only be a measure of the value of output, not of its volume or composition. And the record of exports is more than a measure of output; it also reflects the growth of Cork as the through-port for the products of other regions. In addition most trade data relate only to foreign and legitimate traffic; the smuggling out of goods (a fairly unimportant consideration) and coastal traffic (important in certain commodities) can only be partly documented. Yet this said, the striking long-run growth of both rent and regional exports do point to the underlying dynamic character of agriculture: a six-fold growth in rents has been suggested; butter exports more than quadrupled in the course of the century, while cereal exports from the region towards the end of the century were well above ten times the volume leaving Cork ports near the beginning.

From the time of Payne's propaganda for the plantation in 1589, outside observers stressed the habitability of south Munster, the gentleness of its climate and the fertility of its soils. In fact claims about climate were more accurate than those about soil, for the region's mild winters and soft summers are striking, even by Irish standards;¹ they have ensured the long-term dominance of grassland farming.

over tillage. But other influences have swung the balance towards agricultural activity in parts of the region at certain periods in recent history, at which time soil quality has been the most important determinant of tillage regimes. The underlying American geology has imposed a corrugated landscape running nearly parallel to the Waterford/Cork coastline: ridges of Old Red sandstone, most noticeably the band of upland from Decies in the east, encompassing most of Barrymore, Barretts and Muskerry, and ending in the mountainous peninsulas of Bear and Iveragh, are flanked by carboniferous valleys. Thus rivers and limestone-based soils are in close proximity in the case of the Lee, of the Blackwater (in its eastwards course) and of the latter's tributaries, the (eastern) Bride, the Awbeg and the Funcheon. In spite of the intermittent presence of parent limestone, the soils of the region are not naturally suited for regular cultivation. The best tillage soils are those in the limestone zones where acid brown earths - medium textured, draining well but considerably leached - predominate, notably in Fermoy and Imokilly baronies. The best grassland occurs on the neighbouring 'grey-brown podzolic' the dominant soil of Tipperary and east Limerick, which penetrates down to Mallow and predominates in Orrery and Kilmore baronies. The most common soils in the rest of the region are the 'peaty podzols' of upland west Cork and south Kerry, fairly unresponsive even as pasture, and the 'brown podzolics' of the sandstone uplands, the coastal districts and lowland Kerry. This latter soil if its nutrient defects are compensated for, can be an adequate basis for mixed farming. When eighteenth-century observers disputed the extent of waste and mountain pasture in the region, it

2. Comments on soil types in the region are drawn from two sources: General soil map of Ireland (Ordinance Survey, Dublin, 1969); An Foras Tuluntais, West Cork resource survey (Dublin, 1963), pp.A15-A69.
was peaty podzols to which they were referring, the land which Sir Richard Cox reckoned in 1759 would not 'admit of reasonable pasture or tillage without great pains'; in contrast the lowland Cork soils were characterized by Townsend as 'generally kind, but seldom strong', being easily exhausted by under-manuring and over-cropping.

The maintenance of soil fertility was uppermost in eighteenth-century discussion of soil chemistry. Yet however empirically sound many of the improvers' notions concerning 'manures' were, they were based on a very imperfect understanding of soil science; for instance the separate function of lime as an agent neutralizing acidity was not distinguished from those of other 'manures' in supplying nitrogen, phosphorous and potassium to the soil. And the region's soils, as measured by sample in 1959, were deficient on all counts: co. Cork soils were 62% unsatisfactory or very unsatisfactory in lime status, 90% in phosphorous and 51% in potassium. Except for the latter, Cork was below the average Irish fertility rating.

Natural soil fertility must be considered in conjunction with the availability of natural fertilizers: however depleted in lime the soils on the limestone strata might be, the existence of surface outcrops of the parent material has made it possible to maintain and indeed to raise the soil's fertility through the periodic spreading of lime gravel or burnt lime. In the coastal areas, the availability of calcareous sea-sand has allowed the repeated cultivation of cereal crops such as barley which have a high lime requirement; eighteenth-century farmers were well able to discriminate between 'good' and 'bad' sand. And more organic manures came into use during the period, notably sea-weed, which having a high potassium element facilitated potato culture.

3. Letter from Sir Richard Cox, Bart. to the High Sheriff of the county of Cork relative to the present state of the linen manufacture in that county (Dublin, 1959), pp.9-10.
4. Townsend, Cork, p.455.
Topographical descriptions of south Munster before 1750 usually made a point of emphasizing the variations in land quality, but generally represented farming as mixed, implying that it lacked the specialization which had emerged in the north of the province. Yet a degree of specialization had occurred since the 1690s inside pasture farming: sheep and bullock-fattening were eclipsed by dairying. And while the proportion of tillage up to mid-century did not change dramatically, wheat (and possibly oats) declined, and barley and potatoes advanced. In the third quarter of the century, the basic proportions clearly altered in favour of grassland, as dairying reached a new preponderance. The 1770s marked a turning-point and initiated the recovery of all types of cereal production, which fanned out from the optimum tillage districts. The process was gradual and even as late as 1790 it was said of co. Cork that it was "presque tout en paturage", but by 1811 a local writer felt that Cork 'cannot be generally considered as a grazing county...'. In absolute terms dairying was still expanding, but it was doing so in those areas least suited for cultivation, while the rise in tillage was at least partly achieved by extensive reclamation.

It is impossible to explore these trends closely without examining the course of change at a more microcosmic level. For the purpose of such analysis, a tentative division of the region into thirteen farming districts is set out in Map 2: these reflect variations in soil type, relief, fertilizer availability and other determinants of land-use such as market access, as well as the contemporary attempts at categorization.

[Citation 7]

[Citation 8]

[Citation 9]

[Citation 10]

Local topographical surveys of the period used the barony as the unit for describing agricultural variations. Not surprisingly these bore little direct relation to farming districts. However certain barony names are retained in the following classification where there approximate overlap.
Orrery/east Duhallow

A considerable portion of this district of grey-brown podzolic soils was already productive farming land by the beginning of the eighteenth century. The poorer soils lay towards the west, where extensive reclamation from woodland had taken place before 1700. Sheep farming had probably been the dominant activity on the better soils for most of the seventeenth century, but a gradual shift towards other forms of livestock farming was hastened by the severe sheep rot of 1716-7 which decimated flocks; certainly by the late 1730s the low wool prices had transformed any remaining large sheep-master to beef production and dairying, although most dairy farms probably maintained small flocks. Even bullock fattening may have given ground to dairying on all but those farms particularly well suited for fatstock. Pastoral farming tended to be in the hands of larger tenants, whereas barley, oats and potato cultivation featured much more prominently in the small farms and joint tenancies of gneivers. In this district as in other areas of prime land the latter fared particularly badly in the competition with graziers and dairy-owners for leases. There seems to have been a fairly decisive fall in tillage acreage in the 1720s, at least around


13. Compare the comment on the staples of the Egmont estate in 1718 with one of 1739: Berkeley Taylor, Ballymacow to Baron Perceval, 6 Nov. 1718; Richard Purcell, Kanturk to the Earl of Egmont, 22 May 1739, Egmont MSS (B.L. Add. MSS 46,983*, p.125; 47,004*, p.67 [N.L.I. Mic. p4,675; p4,677]).

Liscarrol where the rector was repeatedly complaining in the 1720s that his tithe income, dependent on tillage, had fallen by half as 'the farmers here run chiefly on dairies, bullocks and beeves...'. A measure of cereal production remained, but the events of the 1740s had particular impact on the gneever group. The climatic extremes in the early years of the decade, with wildly fluctuating harvests, extreme cattle mortality and increased labour costs following the human mortality of 1740/1, caused erratic returns which undermined many small tillage farmers. The 1743 statute forbidding the burning of land further weakened them as many used this mode of preparing the fallows even where lime was available. The fall in the tithe value of Kilshannig parish from £300 to 'scarce £100' between 1743 and 1747 was cited as a demonstration of the impact of the act. On the twelve Perceval/Egmont townlands in Castlemagner parish surveyed in 1744, the eclipse of tillage was very evident: on five townlands there was no cereal cultivation whatever, and on the remainder there was an average of 13.6 acres (stat.) per townland (or slightly under two acres per house). The acreage under potatoes was slightly greater and more evenly distributed. In contrast there was an average of about forty-five cows 'etc.', twenty calves and seventy-seven sheep per townland. Smith was struck in 1750


by the paucity of tillage in the district and by the low density of population.\textsuperscript{20}

The primacy of dairying was not challenged before the 1780s, although the growth of tithe value in several of the local parishes before that cannot be explained simply by the rising value of static acreages of potatoes, meadow and corn: Liscarrol parish tithes, worth considerably less than £32 in 1742 were valued at £80 in 1774; the value of those for Ballyclogh union rose, it seems, from £140 in 1762 to £195 in 1774, and those for Churchtown and Kilbrin from £200 to £300 in the same period;\textsuperscript{21} one possible explanation is that there was already some recovery of corn production by the mid-1770s. Yet in 1774 the rector of Mallow, speaking of the lowlands north of the Blackwater in general, asserted that the gradual eclipse of tillage which spanned the previous half century was more complete than ever, and that the disappearance of the gneeever joint-tenants was a continuing phenomenon around Mallow with the encroachment of dairying.\textsuperscript{22} Even in 1788 Daniel Beaufort, entering the district from the Maigue valley in co. Limerick, noticed the fall-off in tillage as he went south from Charleville.\textsuperscript{23} Yet the pendulum must already have been swinging back: two decades later when Townsend investigated the district, he found that over the previous thirty years the large-scale grazier (and by implication

\textsuperscript{20} Smith, Cork, i, pp.301, 310, 313, 316.

\textsuperscript{21} William Pearde, Castlelyons to Francis Price, 30 July 1745, Puleston MSS (N.L.W. MS 3,579D \textsuperscript{\textcopyright} N.I. Mic. p3,263\textsuperscript{\textcopyright}); Brady, Clerical and parochial records, ii, pp.29-30, 74, 249, 705. It is not clear whether the estimates of incumbents' incomes refer to current tithe-lease settings, or are a valuation of compounded tithes were they out of lease. The problem is not too serious because leases of tithes were seldom for more than eleven years.

\textsuperscript{22} Mockler's 'Mallow in 1775', 20-1, 23.

\textsuperscript{23} Beaufort, Travels in 1788, i, pp.75, 79 (T.C.D. MS K.6.59).
dairy-owner) had given way to smaller farmers who were combining sheep with tillage farming; on the best soils of Orrery nonetheless, cattle fattening survived.  

Fermoy/Condons

The agricultural history of this district to the east was fairly similar. Limestone underlies most of it, and the soils of the barony of Fermoy - still referred to as 'Roche's Country' in the eighteenth century - were compared by Townsend to the proverbially rich Limerick ones, and though less 'luxuriant', he reckoned them 'more tractable to the operations of culture, from the drier and lighter texture of the soil'. Certainly the lowland part of the district was regarded as a traditional corn country and had clearly been a settled farming region before the seventeenth century. Some of the more successful seignories of the Munster plantation were located in the district, yet even around Doneraile, the centre of one of the most important, there was a pattern of fairly dense clustered settlement as late as 1728, suggesting a bias towards joint-tenancy tillage farming. The extent to which such a pattern survived on the lowlands is unclear; certainly dairying was less prevalent than in neighbouring districts and sheep more prominent. The locally-available limestone gravel (which did not require kiln-burning to be an effective fertilizer) was excellent for corn, less adequate for maintaining meadow.


25. Ibid. p.455.

26. Cf. Map of part of the ... manor of Doneraile by Robert Houston, May 1728 (copy in possession of Mr. Ceal Callaghan, Doneraile). N.B. Young's only specific reference to rundale in co. Cork was in this district (Young, Tour, ii, p.13).

27. Townsend, Cork, p.455.
1745 when a potato scarcity was particularly affecting co. Limerick, it was this district which alone had the grain to supply it. However Mockler of Mallow in his jeremiad of 1774 maintained that tillage was no longer apparent, and that even in the centre of this old corn country - the parishes of Glanworth and Castletownroche - the acreage under corn was only a quarter of that half a century earlier. Yet in the same year the first flour mill in the north of co. Cork started production in the latter parish (the tithe valuation of which moved from £400 in 1762 to £860 in 1774) and Young's comment on the locality two years later was unambiguous: 'No graziers here; the rents are made by tillage and sheep, and a few dairies'. Cereal culture, specifically that of wheat, was generally consolidated over the succeeding generation, helped by the vigorous local urban growth (notably of Fermoy and Mitchelstown) and by the easily-harnessed water-power which drove five flour mills in the district by the first decade of the new century.


30. Young, Tour, ii, p.16; Brady, Clerical and parochial records, ii, p.173. Its rise over the succeeding dozen years - to £1,040 - was less dramatic (Richard, Bishop of Cloyne to Lady Louisa Conolly, 12 Sept. 1786, Conolly MSS (T.C.D. MS 3,978/903).


32. Wakefield, Account of Ireland, i, p.389, Townsend, Cork, pp. 467-8; Newenham, Circumstances of Ireland, append. p.32.
Araglin

The eastern halves of the baronies of Condons and Clangibbon, marching cos. Tipperary and Waterford, form a small upland district with much poorer soils, away from the limestone. It was an area of continuous reclamation during the century; iron-works using local ore and timber had already initiated this process in the seventeenth century, and the passage of the main turnpike road linking co. Cork with Tipperary and Dublin was a further stimulus: a traveller passing along it in the 1740s noted that Kilworth mountain had been transformed in thirty years from a waste to adequate pasture ground for cattle 'and every half-mile little plantations and farm-houses'. Dairying was probably the staple on the lower grounds around Kilworth, and summer grazing of dry stock that on the hills. Reclamation was being encouraged on the Kingston estate along the base of the Galtees north-east of Mitchelstown in the 1770s, after the construction of a new road from Mitchelstown towards Cahir. In commenting on the Kingston estate as a whole – which stretched from the richest lands in Fermoy across this district into south-west Tipperary – Arthur Young was struck by the density of population on it, the smallness of the farms, the prevalence of joint tenancy.

West Waterford

To the south-east lay a much more complex zone, which comprised parts of Barrymore, Kilnatalloon and, in co. Waterford, nearly all of Coshmore, Coshbridge, and much of Decies. The fertile river valleys of

33. W. R. Chetwood, A tour through Ireland by two English gentlemen, 2nd ed. (Dublin, 1748), p.132; Smith, Cork, i, p.357.
34. Smith, Cork, i, p.357.
35. Young, Tour, ii, append. p.68.
the lower Blackwater and particularly its tributary, the Bride, might seem to have little in common with the coarseland on the Knockmealdown foothills and to the north of Dungarvan. Yet the whole district enjoyed easy access to navigation, whether riverine or maritime, and it was this that helped to determine its distinctive history; further, a great part of it formed the premier Boyle estate from the early seventeenth century.

The massive scale of Youghal's timber exports from the time of the Great Earl, taken together with the charcoal consumption of the several iron-furnaces around Lismore, are some indication of the considerable landscape changes that must have occurred in the west of the district during the seventeenth century. New English settlement was concentrated along the river valleys and around the Boyle towns of Tallow, Lismore and Cappoquin: in the 1680s the whole Bride valley was noted for being 'populous, rich and well-improved'; the wealth of Tallow was already linked to the fact that the Bride was navigable up to Tallowbridge. Given the prominence of butter exports from Youghal downstream at this period, it seems likely that dairying developed precociously hereabouts. Nevertheless this cannot have been at the expense of tillage: a survey of the Bride valley estates of the Earl of Burlington in 1717-8 found most of the farms suitable for tillage and dairy, and implied that use of sea-sand brought up from Youghal was very common. Later in the century on the Decies side of the Blackwater, the interference with sea-sand loading at the mouth of the river provoked alarm: 'all the country have been taking it for manure


37. Survey of part of the Earl of Cork and Burlington's estate, 1716-7 by Josiah Bateman, Lismore MSS, (N.L.I. MS 6,148); Smith, Waterford, p.68.
for time immemorial [sic], which occasions a general murmuring amongst all people on this river and the river Bride, as it will prevent tillage, that being the only manure they had', which was a slight exaggeration as lime was available on the upper Bride). In the 1740s on the Burlington estates in the district, corn was regarded as making half the year's rent, butter and a little beef the rest; at the same period around Castletelyons, prosperity was still being linked to good prices for corn, although the Burning act was observed to have greatly lessened tillage. By this time the significance of Youghal as a centre of foreign trade had greatly diminished, with only barley lingering on into the 1740s as a modest export. This decline undoubtedly had an adverse effect on land values up the river valleys as they became peripheral suppliers of the Cork market.

The lime-based brown earths of the Blackwater valley continue east of Cappoquin to Dungarvan along what was the original course of the river; around Dungarvan harbour itself there is rich calcareous sand. Together they form a propitious setting for tillage. However the country to the south-west, north and east of the town is hilly, and much of it unproductive land. Developments in the seventeenth century are obscure; although Dungarvan itself became part of the Boyle estate, the locality did not see significant new English immigration. There is no record of Dungarvan's foreign trade at that period - or later - as it was subsumed in the returns for Youghal, but it was probably not important. Most of the local agricultural surplus throughout the eighteenth century (and maybe even earlier) was coasted to Dublin.


40. Copy, Youghal to the Earl of Burlington, 1 May 1728, Shannon MSS (P.R.O.N.I. D2.707/A1/13/6).
The origins of this traffic are uncertain, but by the late 1720s Dungarvan was a major supplier of corn and especially potatoes to the Dublin market. It is not apparent what local comparative advantage gave rise to the specialization in potato culture; soil conditions may have been peculiarly favourable - the district supplied other parts of the region with seed potatoes by the 1740s, and later in the century its potatoes were noted for their dryness - but whatever initial factor gave Dungarvan a niche in supplying the capital with potatoes and barley, the impact of the trade came to be felt outside the port's immediate hinterland: potatoes were being cultivated for the Dublin market around Cappoquin by 1740. Both potato and cereal cultivation were in the hands of small gneever tenants; indeed over the century there is more evidence of clustered settlement and more reference to rural villages in west Waterford and Kilnataloon than in almost any other part of the region. Potato cultivation was labour intensive, and the organic manure requirements were such that large-scale production was impractical.

41. This is evident from ship arrivals at Dublin port as recorded in the Dublin Gazette in 1729 and 1730.
42. William Pearde, Castilelyons to Francis Price, 20 April 1740, Puleston MSS; Hibernian Magazine, March 1779, 190.
44. Potatoes around Cappoquin were being produced by smallholders with 'plantations of but three or four acres': John Keane and Matthew Hales, Cappoquin to Sir William Heathcote, 2 March 1740/1, Heathcote MSS (P.R.O.N.I. T3,091/A3/73).
45. Bateman's survey of Burlington estate, 1716-7, passim; maps and survey of the Cremorne estate, 1778-80, passim (N.L.I. MS 3,201), agricultural survey of the estates of Lord Cremorne and Holmes, 1800 by R. Mayne, p.30 (N.L.I. MS1,697).
This coastal trade was not however sufficient to prevent the general regional swing to dairying from affecting the district. In his 1746 survey of Waterford, Smith emphasized the displacement of arable and of 'village' tenants by dairying as a general and ongoing characteristic of the county, and another a writer on the county in 1765 came to a similar conclusion. Even c.1780 it appears that dairying was encroaching on upland farms near Tallow: a dairy-owner with 800 cows secured a lease after those set to 'about two hundred villagers, whose ancestors had been driven out of the rich lands of Tipperary' had expired; their cash crop had been potatoes for the Dublin market. Even on some of the prime land on the Burlington/Devonshire estate near Lismore and Tallow, where corn had still made half the year's rent in 1755, evidence was found in a survey of 1773 of the recent advance of dairying, so that on 'good land... originally well divided... the hedges... are all broken down and the land running to furze'.

But as elsewhere the 1770s mark a turning-point in west Waterford. Periods of scarcity in Leinster and Ulster during the 1750s and 1760s had excited the coastal trade in grain and potatoes, but it was the rise in the export of oats to Britain from the Youghal/Dungarvan customs district that marks the beginnings of a very rapid twenty-year advance in agriculture over much of the district. In the early 1770s the annual shipment of unprocessed corn coasted and exported from the two ports was about 1,100 tons p.a.; by the first half of the 1790s it was running

47. J. Stephenson, Examinator's Letters... (Dublin, 1786), p.80n.
48. Copy, William Conner, Cork to Sir William Abdy, 4 March 1755, Conner letter-book, Devonshire MSS (P.R.O.N.I. T3,158); 'Remarks and observations on the manner of Lismore' by Bernard Scalé, 1773, Lismore MSS (N.L.I. MS 6,201).
at about 14,000 tons p.a. (almost 12,000 exported, and over 2,000 coasted to Dublin). The effects of this growth were fairly striking; for instance the tithes of Mogeely, a parish on the Bride upstream of Tallow, which were valued at £250 in 1774, gave an income of £1,000 in 1796. As Richard Musgrave, living near Cappoquin and dealing himself in grain, remarked in 1792 the corn trade was bringing 'an astonishing degree of prosperity' to the district. Corn's achievement however may have been somewhat at the expense of potato exports: Dungarvan was only sending about 365 tons p.a. of the latter to Dublin in 1798-9. Dairying also almost certainly retreated, and reclamation, both planned and unplanned, advanced on coarse soils, previously only used for summer grazing. The Drum hills, running west from Helvick Head, were being transformed at the end of the century into cultivated farms by a mixture of large-scale enclosure and small-scale squatting. To the north of Dungarvan, reclamation was also bringing tillage to some of the mountain parishes.

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49. This is a comparison of the average exported to Dublin, Britain and abroad 1767-72 with that for the years 1791-6; (the former also includes grain shipped direct to northern ports). See Append. tables xv and xvi for details and sources.


52. Account of potatoes shipped coastways to Dublin, 1798 and 1799, Official papers (S.P.O. OP/72/6).

53. Wakefield, Account of Ireland, i, p.323.

54. See below pp. 398-400.

The mid-Cork uplands

The line of sandstone that divides the prime farming lands of north Cork from the maritime districts takes in sections of seven baronies in Cork and Waterford, including the greater part of Barrymore and all of Barretts; most of it lies between the 200' and 1,000' contour. Its coarse, poorly drained podzolic soils are unattractive for agriculture, yet settlement and farming greatly expanded here over the century with colonization initially along the 'bottoms' of the mainly southwards-flowing small rivers. As with so much of the higher grounds in the region, settled farming evolved from the summer grazing of dry cattle, and even in mid-century 'mountainous tracts' of Barrymore were said to be 'in the winter season unfrequented by man and beast,... in summer no unelegant [sic] places of abode'. The penetration of the district by a number of routes linking the Blackwater valley with south Cork probably hastened its development, but the primary impulse towards reclamation and intensification of farming was quite simply its proximity to Cork city: most of the district was within half a day's ride. Thus it is hardly surprising that dairying emerged early in the century as the dominant activity in the areas of permanent settlement. But unlike the surrounding districts to the north, east and south, dairying did not grow at the expense of tillage, nor did it fall back with the advance in corn prices towards the end of the century. Rather the acreage of tolerable grassland and meadow capable of supporting dairy stock around the year gradually expanded over terrain previously used only for summer grazing. There were of course reclamation projects -

56. Smith, Cork, i, p.163.
57. Cf. Smith, Waterford, p.64.
such as Robert Gordon's New Grove colony and Edward Roche's Kildinin enterprise already noted — where a degree of continuous cropping was intended, but the relatively high cost of calcareous manures generally discouraged anything beyond oats culture on potato ground. Rearing of young stock survived beside dairying, to service the dairy herds of other districts: in 1791 four upland farms on the Hyde estate near Glenville were being advertised as primarily suited for rearing, with some arable and 'inland' fit for dairy cows. The standard dairy system of letting out cattle probably lasted longer in this district than on the lowlands, but even here it was declining by 1810. Yet if the Barrymore estate (which ran across the centre of the district) was typical, it would seem that even in the 1760s small farming tenants, who owned their own stocks, held as much land as the large tenants, presumably dairy-owners.

The Boggeraghs and Slieve Luachra

This district — north Muskerry, west Duhallow and a segment of east Kerry — covers an area of upland mainly lying above the 500' contour, with the Boggeraghs in the south-east and the Mullaghareirks in the north-west rising well above 1,000'. It is largely the catchment area of the upper reaches of the Blackwater. The Boggeragh soils are

59. Townsend, Cork, p. 578.
60. This is suggested by the leasehold structure of lands being reset on the Barrymore estate in the late 1760s: in upland townlands six denominations were in the hands of five gentlemen, each holding an average about 500 acres (stat.); seven denominations were in the hands of upwards of fifty tenants, some in partnership; the average holding in the latter denominations was about 50 acres: O'Buachalla, 'Barrymore estate, 1768', 35-50; Cork Evening Post, 2 Jan. 1769.
classified as peaty podzols, those further north, predominantly gleys. Permanent settlement developed more slowly than in the mid-Cork uplands and much, at least in the southern part, has never been reclaimed. It was however an important zone of cattle-rearing. The Boggeraghgs were particularly noted in this connection; they were largely commons, and throughout the century 'vast' herds were summer grazed,61 some being taken up even from Carbery; transhumance almost certainly continued well into the century.62 The pockets of permanent settlement probably grew after the construction of the turnpike to Kerry across these hills at the end of the 1740s. North of the Blackwater, the Aldworths' ambitious seventeenth-century attempts to develop a colony around Newmarket astride the 500' contour, on the road to north Kerry, had little long-run impact: its stagnation before 1700 was attributed to the Cattle Acts and their adverse effects on local store cattle production.63 Much of west Duhallow was in fact little influenced by its landlords: Castlemacaulliffe was a Boyle manor but, in the words of the Earl of Orrery's Charleville-based agent in 1704 was 'worse to deal with than any part of Kerry',64 while 'Poble O'Keefe' remained in the hands of the Crown, was let out on very long leases and was only actively managed from the 1830s.65 Grazing dry stock remained the major farming activity

61. Cf. comment re the Boggeraghgs in the county map in Smith, Cork
62. E.g. depositions re Corragrage, c.1710, Lombard MSS (N.L.I. uncat. collection).
63. Cf. 'Reasons why Sir Richard Aldworth now cannot pay... crown rent for Newmarket...' 1669, Orrery MSS (N.L.I. MS 13,189/1).
65. On it was built the state's only 'estate village', Kingwilliamstown, in the early 1830s: J. F. O'Flanagan, The Blackwater in Munster (London, 1844), pp.168-70.
at least until the mid-century road improvements facilitated access to Cork markets. The construction of the Rathmore-Castleisland turnpike, together with the opening of nearby limestone quarries, encouraged fairly extensive reclamation on the Earl of Kenmare's mountain estate north-west of Rathmore. Yet although this could produce fine wheat above the 500' contour, tillage was not the tenants' object: 'they will never stop till they lay it out properly for grass...'. This combination of cheap limestone and purposeful estate management probably only accelerated the coming of dairying into the district. By the 1790s the mountain parish of Clondrohid in north Muskerry was seen as a locality full of cows, giving a large tithe revenue completely out of potato cultivation, while a later traveller on the turnpike through the Boggeraghs was struck by the ubiquity of dairying. Lime and turf resources, together with the improvement of roads allowed the gradual replacement of the great empty rearing farms by denser settlement. In the south-west of the district, the advance of reclamation on the Colthurst Ballyvourney estate between surveys of 1761 and 1812 was very noticeable, although cattle rearing remained important. But even in west Duhallow, reclamation was introducing a measure of corn culture: in a tithe survey c.1800 of a mountain parish (probably Clonfert) oats and wheat, taken together, were reckoned to contribute almost as much to tithe income as potatoes. For in spite of its height, and its wet clay soils, the district had abundant marginally reclamable land: thus in the first half of the nineteenth century, this part of the region

66. See Kenmare's Observations, c.1755 in MacLysaght, Kenmare MSS, passim.
67. Note on Knocknaseed, ibid. p.440; also 1762 memorandum on this farm by Kenmare, p.442.
68. Coquebert de Montbret (B.N., n.a. MSS 20,099, p.140); Hibernian Chronicle, 29 Dec. 1791.
69. Maps of the estate of Sir Nicholas Colthurst by Thomas Logan and son, 1812 (with notes on earlier surveys), Colthurst MSS (Blarney Castle, co.Cork)
70. Tithe book (Clonfert parish?), n.d., Ryan Purcell MSS (Cork Archives Council).
probably sustained the highest rate of population growth.\textsuperscript{71}

\textbf{Imokilly}

This district reaches from the maritime parishes of Barrymore - Carrigtwohill and Great Island - east across lowland Imokilly barony, and takes in the south-west corner of Decies. It enjoys an optimal setting for agriculture on three counts: firstly its brown earths, similar in type to those of Fermoy, straddle two east/west seams of limestone; secondly it has the driest and sunniest climate in the region, and thirdly it has very easy access to water transport, marine fertilizers, and urban markets. A high proportion of it must have been reclaimed for regular farming long before the Munster plantation, and although eastern Imokilly became one of the more successful seignories under Raleigh and Boyle, the district as a whole was not revolutionized by the new order, rather it absorbed it.\textsuperscript{72} It was probably the earliest source for grain exports from the region, for it had been 'properly the granary of Cork' many generations before it was so dubbed by Rye in 1730.\textsuperscript{73} It had also contributed to Youghal's dynamic seventeenth-century export trade in wool and butter, and indeed the eastern end may have suffered somewhat as external trade after 1700 came to be centred on Cork.


\textsuperscript{72} Old English families to survive as landowners in the district (after conforming) included the Barrymores, the Supples, the Uniacks, the Corkbeg and the Dromana Fitzgeralds - the latter two in the female line - while the important Brodrick/Midleton estate was a product not of the Munster plantation, but of the Cromwellian confiscation of the estate of Sir John Fitzgerald of Cloyne.

\textsuperscript{73} Cf. Thomas Bates' account of corn purchased at Cork, 1631 in Derenzi MSS (P.R.O. S.P. 46/92).
For most of the eighteenth century its distinctiveness lay in the genuinely balanced mix of dairying and corn production, without the struggle between tillage-dependent gneevers and large dairy-owners characteristic of the good lands of north Cork. For although partnership tenure survived on well-improved land it was noticeably less common than in other districts. In 1732 the agricultural surplus in each ploughland of Imokilly barony was reckoned to be 1½ tons of butter, forty barrels of barley and the same of oats; this would suggest that, above subsistence requirements, there were ten acres of tillage and fifteen cows (i.e. at least thirty acres of pasture and meadow) in each such denomination. There were similar proportions on two large townlands near Clashmore on the eastern appendage of the district in 1743; assuming similar yields, there were fifty-seven acres under barley and oats, and ninety-seven cows.

Grassland thus predominated although tillage was well integrated into this; as elsewhere immediate proximity to the coast raised the proportion of tillage. In the last quarter of the century with the upswing in corn prices, the pattern changed. The eastern half of the district contributed to the huge growth of Youghal's oats and barley exports, while west of Killeagh, demand from Cork for wheat and malting barley dominated local farming; dairying slipped back although it did not disappear. Midleton and nearby Ballynacorra, together with other inlets along Cork harbour, became centres of the corn trade.

75. 'A discourse between two countrymen, Nov. 1732', Shannon MSS (P.R.O.N.I. D2,707/A1/11/50).
77. Townsend, Cork, pp.610,612,614.
and lading points for cargoes destined for outside the region. Tithe values for Midleton parish give some indication of the intensification of tillage in the period: worth £450 in 1762, £600 in 1774 and about £800 in 1785, they had reached £2,800 by 1811. By the latter date although the limestone lands were still rated 'the best cultivated tract' in co. Cork, there were signs around the district 'so long a seat of dense population' of over-cultivation and soil exhaustion.

Cork city liberties

The jurisdiction of Cork city was by Irish municipal standards very large, embracing an area eight miles by ten. It is possible to discern by the early eighteenth century an agricultural district, characterised by very high land values, intensive farming and the production of certain fresh foods for the urban market, which was slightly smaller than and not quite overlapping with the 'county of the city of Cork'. The agricultural district was perhaps seven miles west to east along the Lee valley and its limestone soils, five miles north to south. By mid-century when the city's population was perhaps 40,000, one of its distinctive elements was already apparent: it had 'more the air of a garden then a rural prospect', with 'its plain neat houses, small pleasant gardens and pretty plantations': the small desmesnes of merchants and professional families dominated the prominences from Carrigrohane to Glanmire and Blackrock. Some of these were farms

78. Brady, Clerical and parochial records, ii, p.391; Wakefield, Account of Ireland, ii, p.469.
79. Townsend, Cork, pp.21,608,610-1.
80. Smith, Cork, i, p.363.
in their own right, but in servicing the city's food requirements, they were much less important than the not so conspicuous small dairy and tillage farms that covered most of the district. The high land values locally were not simply the result of low transport costs and of the proximity of regular demand. There were certain special factors, both on the demand and supply sides. There was the fresh milk market for dairies, to supply which there was probably some limited winter dairying. The development of market horticulture also appeared around the immediate city perimeter (although the scale of this development, given the size of the city by the later eighteenth century, was not as great as one might expect). Supply factors were clearly a more important influence: the city produced a striking variety of waste products suitable for fertilizing land and feeding cattle: from 'night soil' and street dung - the Corporation had a revenue of about £34 p.a. from licensing the collection of dung in the mid-1720s - to soap-ashes and waste salt from the slaughter-houses, lands in the liberties received the full range of necessary soil nutrients; dairy cattle were fed on the waste grains, wash and bran from the maltings, breweries, mills and distilleries, by-products which became increasingly available in the later part of the century. The general effect was to preserve a rather


82. E.g. advertisement for Lehanagh, Cork Journal, 10 March 1757; Townsend, Cork, p.702.

83. What appear to be market gardens or allotments of some description are a prominent feature immediately south of the city in John Rocque's Survey of the city and suburbs of Cork, 1759; cf. Townsend, Cork, p.702.


85. See advertisement for Ballincollig farm, Cork Evening Post, 2 Dec. 1793; Townsend, Cork, p.702.
intensive mixed-farming pattern. In a 1798 survey of thirty townlands
and 136 farms in the three parishes of Carrokippane, Carrigrohane and
Kilnaglory (forming the western end of the district) tillage and dairying
were complementary, although tillage was clearly the more important.
There were on average 5.2 cows, 4.2 acres (stat.) of potatoes and 11.9
acres under wheat and oats per farm. 86

South Cork coast

The coastline from Cork harbour to Cape Clear is heavily indented
and often rocky, yet the maritime district lying within five or six miles
of the sea is almost completely below the 500' contour. There is a
superficial uniformity in soil type: brown podzolic on a sandstone base.
However the quality of this soil and the suitability of the terrain
for agriculture deteriorates from east to west. The land with highest
agricultural potential lies in the small baronies of Kinalea, Courceys,
Barryroe and Ibane.

It was a district of traditionally dense settlement. The importance
of the coastal fishery, specifically that for pilchards, has already
been discussed, and it was this factor that Cox used to explain why
Carbery barony was 'pretty well inhabited' in the 1680s; 87 pilchard
fishing certainly accounted for the development of the new English colonies
west of Kinsale. But an eighteenth-century explanation of the district's
populousness was that it had been in effect a refuge area for those driven
from the richer districts. 88 Whatever the earlier causes, it is quite

86. Survey of farms in Carryigrohane, Currykippane, and Kilnaglory,
in letter-book of Commissary-General, Cork, 1798-9. (T.C.D.
MS 1,182/1/31-7) Hereafter cited as 'survey of Carrigrohane etc.,
1798'.

88. Letter from... Cox to the High Sheriff, pp.10-11.
apparent that by the early 1700s the population supported itself on intensive agriculture. The key to this was the almost universal use of the calcareous seasand available along most shores. It was carried inland up to five miles, and was taken a similar distance from the navigable limit of the Bandon river at Inishannon. It is not clear how old this practice was; certainly sand was reaching Muskerry from Inishannon in the 1650s.

New landowners in the district in seeking 'improving' English tenants, may have introduced an element of pastoral farming which faded relatively quickly. For instance the lands around Galley Head were 'a brave sheepwalk' in 1677, but after the flocks disappeared during the Williamite wars, the lands were let to 'poor Irish fellows'. On these lands a definite tillage regime had become established by the second quarter of the eighteenth century: in the 1740s the gneever subtenants made their rent with barley and potatoes for the Cork market; they had few sheep or cows.

Barley was probably the earliest cash crop, but it was rapidly joined by potatoes. The high lime requirement of barley was met by the regular application of seasand; the high potash requirement of potatoes, which elsewhere was satisfied by the application of animal dung or by the burning of lea was here met by the use of seaweed; this was not a traditional practice but seems to have been introduced sometime

89. Burke’s argument for accepting five miles as the average limit seems reasonable: Burke, 'Eighteenth-Century Cork', 75-6.


91. Transcript of survey of Perceval estate, 1677, p.60. Also Arnold Gookin to Sir John Perceval, 22 May 1710; Richard Purcell to the Earl of Egmont, 30 April 1744; Mathew O’Hea to the Earl of Egmont, 8 July 1744, Egmont MSS (B.L. MSS 46,978*; 47,009*), pp.70, 99-100 (N.L.I. Mic. p4,674; 4,679f).

before mid-century. A constant rotation without fallow became possible where weed and sand were used before potato and barley (or wheat) respectively. This did not cause soil exhaustion: one visitor to Courceys in 1790 was told that land there had been continuously cultivated in this way for a hundred years. The result was that the proportion of workable land under tillage near the coast was unusually high. Seaweed however was too bulky to be carried far, and the zone of exclusive arable farming did not at first extend much beyond an Irish mile from the coast. However the district as a whole not only had the highest tillage concentration in the region, but was able to consolidate this during the very period when dairying was making greatest inroads elsewhere. Across the district from the 1740s visitors commented on the phenomenon of cultivation creeping up the hill sides and onto the inshore islands: thus Bishop Pococke, travelling west along the coast in 1758, repeatedly noted the extent of tillage, while twenty years later General Vallancey found that 'from Skibereen to Bandon, the whole tract is one cultivated garden of grain and potatoes, except the barren pinacles of some of the hills and in the boggy bottoms...'.

95. Tour... by two English gentlemen, p.99; Smith, Cork, i, pp.290-1.
The barley/potatoes regime became more varied in the last quarter of the century. Wheat, always a crop associated with the drier, richer eastern sector, expanded with enhanced demand from Cork and - after the 1780s - from local flour-mills which grew in numbers from east to west. Potatoes remained a central part of all rotations: Carbery was said to be the main supplier for Cork city in 1774; by the end of the century the district had ousted Dungarvan from the Dublin market, when Kinsale and Baltimore were sending to Dublin in excess of 7,000 tons p.a. (more than three-quarters of the national total of potatoes coasted at that time to the capital). Oats were a crop for marginal soils and were important inland. This striking continuity of tillage meant that there was largely an absence of the settlement disturbance that was often evident in other districts. Here the general landlord dislike of small gneever tenants did not operate to the same extent, for with fertilizer readily available the prospect of land being damaged by over-cropping was less. Letting-unit size was large, but joint tenancy by implication common. On the Freke Carbery estate in 1787, most townlands were divided into a number of distinct holdings, each having several houses. Most settlement was in loose central clusters,


99. Account of potatoes shipped coastways to Dublin, 1798-9 (loc.cit.). However in 1790 Coquebert de Montbret had recorded that Dungarvan was still the main source of supply for Dublin: ní Chinneide, 'Frenchman's impression', 17.

100. Townsend, Cork, p.250.


102. Cf. leasehold structure of the Freke estate as shown by the letting advertisement in C.E.P., 28 Aug. 1786; Townsend, Cork, pp.251-2.
only a few of which had above half a dozen houses. The few large clusters, in effect rural villages, those with ten to thirty houses, were abreast the coast where settlement was densest. However Townsend remarked of Ibane and Barryroe further east that they were 'in general... full of scattered houses', some of the roads having 'the appearance of irregular streets'. An indicator of the abundance of labour in the district is that there is no record of seasonal in-migration at harvest-time (in contrast to Imokilly and Fermoy). Rather there were signs of limited migration out of the region by the end of the period for, as the parish priest of Clonakilty observed c.1809, 'within a few miles of the shore, cultivation has already reached that point of perfection which appears to set improvement at defiance'. Linked to both the prominence of tillage and the easy availability of labour was the growth of flax cultivation. The emergence of the associated domestic linen industry in this district and in inland Carbery is discussed in chapter 7; here two aspects are relevant. Firstly extensive flax culture spread in the second and third quarters of the century in an already well-populated district; it did not precede or precipitate that situation. Secondly its diffusion was limited very much to Carbery, i.e. to the remoter half of the district, where opportunities for increasing tillage operations were less, but where the pre-existence of regular agricultural activity easily accommodated the inclusion of flax. It generally thrived as a successor crop to potatoes.


104. Newenham, Circumstances of Ireland, append. p.31. See also the comments therein on the ratio of tillage to pasture in several coastal Ross parishes, where the situation varied from no pasture ground (west Barryroe) to one-sixth pasture (Kilmacabea).
The upper Lee and Bandon valleys

The rolling landscape of this lowland district to the west and south of Cork city had witnessed considerable land-use change from the end of the sixteenth century. East Muskerry and Kinalmeaky which form the greater part were heavily wooded at the time of the Munster plantation, but most of the timber disappeared in the following century. Kinalmeaky was probably cleared first: part of the Boyle estate, it was subject to extensive immigration so that by the 1680s it was claimed to be 'now altogether inhabited by English and very well improved after the manner of England'. Muskerry was still at this time thought of as 'a large wooded country' - it had had 8,550 acres (stat.) of woodland in the 1650s - but by 1714 not one acre of old timber remained.

The predominant soil is the familiar brown podzolic, but intersecting the district is the short (western) Bride valley, up which runs a belt of limestone; this is exposed at a number of points and as a result lime-burning in the area was intensively practised well before the 1650s. By 1730 there were 100 lime kilns regularly burning here, and a traffic in burnt lime to the surrounding areas had developed. The effect was to facilitate reclamation in the district, to sustain corn production (barley and oats) on the better lands, and to aid the spread of dairying on poorer soils. In addition, it may have been partly responsible for

106. Johnston and Lunham, 'Cox's description... c.1685', 361; Civil Survey, vi, p.xxxv.
109. Smith, Cork, i, pp.186-7, 219, 221, 260; Cox's letter to Prior, pp.42, 47.
the early emergence here of potatoes as a cash crop. In the south-east around Carrigaline where there was a second pocket of limestone — and easy access to navigation — there was a tradition of wheat culture: Cork's first flour mill outside the city liberties was built here sometime before 1750.

The Bandon valley was influenced by local urban demand from Bandon town and by the plantation traditions of the Boyle estates (favouring enclosure and mixed farming) but in spite of these, pastoral farming predominated until mid-century. It was the growth of tillage and population further south along the coast which swung the balance towards more intensive farming here. In the late 1770s Vallancey noted a transformation in the upper part of the valley since the late 1750s: 'the face of the country now wears a different aspect, the sides of the hills are under the plough, the verges of the bog reclaimed'.

The spread of corn and flax were here inter-dependent; the vigorous attempts to encourage the linen manufacture around Dunmanway between the 1730s and 1760s by Sir Richard Cox occurred as the maritime district developed its great corn and potato trades, and while Cox's enterprise may not have quite achieved what he intended, certainly it helped to promote the extension of flax and tillage inland. For example in the notable flax-growing parish of Kilmeen, lying south of Dunmanway

110. Rye, Considerations on agriculture, pp.49-50.
111. Smith, Cork, i, p.217.
and about eight miles from the sea, the tithes had been worth about £50 p.a.
at the beginning of the century, and were risen seven-fold by 1790. 114

By the end of the century the main stimulus to reclamation came from those
migrating inland from the congested coast, and even the areas of coarse
summer grazing of the 1770s were largely under cultivation forty years
later. 115

On the better lands of Kerrycurrihy and lower Muskerry a pattern of
mixed farming remained even as an increasing density of settlement became
noticeable: 116 from Cork harbour to Macroom, dairying and tillage co-
existed, with wheat dominating in the east, oats in the west and barley
fairly universal. In Carrigaline parish in 1806 about 30% was under
crops (with potatoes forming two-fifths of this): the remainder was
largely under dairying. 117

The south-west peninsulas

The regional trend for land quality to worsen gradually from east
to west is emphasized by the overwhelmingly mountainous complexion of
the whole south-west. From Mizen Head to Dingle Bay a high proportion
of the terrain is above the 500' contour, and most of the lower ground
is either totally unsuited for agriculture or in the marginal category.
The patches of better land close to the coast and near natural fertilizers-

114. Brady, Clerical and parochial records, ii, p.524.
115. Townsend, Cork, pp.310-1; Newenham, Circumstances of Ireland,
append. p.31.
However in 1787 there was still a fairly striking contrast
between the density of settlement on coastal farms of the
Freke estate, and on those along the Lee valley: Sherrard's survey
of Freke estate (loc. cit.).

117. T. Newenham, A statistical and historical inquiry into the progress
and magnitude of the population of Ireland (London, 1805), pp.348-9;
Newenham, Circumstances of Ireland, append. p.27.
such as those on western Bear and Valentia Island - are relatively inaccessible. Nevertheless a belt of coastal settlement, sustained by the inshore fishery, long predated the seventeenth century, and the fishery attracted the first new English immigrants to the district. However it was another aspect of early economic development - the pig-iron industry - which first made any significant modification to the landscape: between the Petty iron furnaces on the Kenmare river and similar charcoal-hungry enterprises on the north side of Bantry Bay and at the north end of the district in Glencar, native woodland had all but disappeared by 1750. 

Reclamation did not follow disafforestation here: for most of the period the locality's fairly sparse population was based on a decidedly pastoral economy, where unreclaimed mountain pasture was the source of stock feeding for the greater part of the year; associated with this was transhumance, which survived in places into at least the third quarter of the eighteenth century. 

Tillage was not totally absent, but it probably fell away in importance as the market economy penetrated the district: it was estimated that in the barony of Glanerough in 1688 there had been about half an acre (Irish) of corn and slightly under two collops per inhabitant, whereas a century later the same part of

118. Lansdowne, Glanerought, pp.12-26; Smith, Cork, i, p.294; Smith, Kerry, pp.94, 95n., 97; O Maidin, 'Pococke's tour in 1758', J.C.H.A.S. lxiii (1958), 87.


120. Transcript of surveys of Petty estate in 1688 and 1692, Orpen MSS (R.I.A. MS 12.L.2, pp.55-8). In this document the Shelburne agent was arguing that corn acreage, cattle numbers and the human population fell drastically between 1688 and 1692; his figures suggest that the corn acreage fell most steeply.
south Kerry was often importing oats and even potatoes from co. Cork; its corn acreage in 1800 was about a quarter the figure for 1688, and even if the 1800 potato acreage is included, local crop production is absolute terms had not risen.\textsuperscript{121}

A limited foreign trade with the continent lingered on in the eighteenth century after the collapse of the pilchard fishery, and although a smuggling trade with France was the most distinctive element of this, there was also some demand locally for goods saleable in France such as butter and beef. But the main props of local farming were cattle rearing for Cork and mid-Kerry dairies, and butter production for the Cork city market. The latter was fairly modest before mid-century - the total butter output in the Bantry area was put at forty tons p.a. in 1737\textsuperscript{122} - but by the 1770s regular consignments of butter were being sent to Cork even from the far west in Iveragh;\textsuperscript{123} butter was probably the major source of income for most of the district from the 1760s.\textsuperscript{124} This remained linked to the management of young stock, and there was some buying in of yearlings from other areas.\textsuperscript{125}

\begin{itemize}
\item \textsuperscript{121} Ibid.; Beaufort, Travels in 1788, ii, p.40 (T.C.D. MS K.6.60); Smith, Kerry, p.75; 'O'Brien's survey' (1968), 87; ní Chinnéide, 'New view of Kerry', 86.
\item \textsuperscript{122} Patrick and Andrew Gallwey, Bantry to Thomas Dillon & co., 21 Sept. 1737, Dillon MSS (N.L.I. Mic. p2,762).
\item \textsuperscript{123} Butter was probably being sent to Cork by the O'Connells in their capacity as dairy-owners before the 1770s, but the earliest direct evidence of the practice is in Jerry McCrohan, Cork to Maurice Connell, 30 Nov. 1773, O'Connell MSS A/12/4 (U.C.D. School of Archives).
\item \textsuperscript{124} This is implicit in Richard White's notes in account-books and rentals 'B' and 'C', 1755-64 and 1765-76, Bantry-White MSS. Cf. Smith, Kerry, pp.97-8.
\item \textsuperscript{125} Young, Tour, ii, p.86.
\end{itemize}
The regional upswing in tillage did not affect the district at first, but gradually the area around Bantry Bay became drawn into the south-coast tillage zone. Corn stores appeared in Bantry in the mid-nineties, about which time cultivation began to spread along the Durrus peninsula (where two-thirds - of the workable land presumably - were claimed to be in arable in 1809) and around the western half of Bear. Wakefield, coming from Killarney south to Bantry in 1808, was told that 'cultivation is every year seen rising higher and higher'. Further north, dairying remained unchallenged. Even by 1814 there was little corn grown in Dunkerron or Glanerought, and Valentia Island - in 1756 'a fertile tract, and esteemed the granary of the country' - was by then under dairies. However if dairying remained strong, there were changes: the old letting system was being weakened and, more importantly, population growth was becoming noticeable by the turn of the century. With the growth of settlement on marginal land, potato cultivation at least was spreading.

The central Kerry lowland

This is a district of medium to poor soils - gleys to the north, brown podzolics to the south - but with some natural fertilizers available: lime from east of Killarney, seasand from Castlemaine harbour.

126. Referred to in lease of plot near Bantry, Richard White to Hamilton White, 26 March 1795, Bantry-White MSS.


It was the setting for two of the more enduring plantation seignories, the Herbert centred on Castleisland and the Bro·jKenmare on Killarney. Cattle production was the main source of income from the seventeenth century, but cereal cultivation for internal consumption only declined towards the middle of the eighteenth century: in 1721 a survey of 150 farms on the Kenmare estate returned 27% of the land as arable (i.e. regularly, not continuously, cultivated). However as communications improved after the 1740s, dairying assumed a primacy in the district that lasted for over half a century. Thus although the land around Killarney in 1760 appeared 'well improved', an observer noted that 'the farmers run into dairies, therefore depend on distant places particularly the county of Cork for their corn'. Reclamation, made easier by lime availability, was clearly designed to increase stocking rates, not to expand tillage. And further north around Castlemaine, in spite of local seasand, the trend was similar. In the two baronies of Magonihy and Truanackmy, which included the Kenmare farms surveyed in 1721 on which there had been over 17,000 acres (Ir.) returned as arable, the estimate of land under corn in 1800 was a mere 1,560 acres (Ir.), with a further 950 acres under potatoes.


131. Report on the roads and passes leading from Limerick to... Kerry, 1760, Pelham MSS (B.L. Add. MS 33,118, f.77).


Market access does not completely explain why this lowland district stood apart from similar districts further east in its continued commitment to dairying. The good reputation that the butter of this and other parts of Kerry was establishing in the Cork market probably helped. Its quality may have been a consequence of the greater proportion locally of small cattle, nearer the old Kerry breed, but the coarse mountain grass on which so many Kerry cattle fed in summer and which made the resulting butter easier to salt, may also have been an influence. By 1800 mid- and south Kerry were supplying about a fifth of Cork market's butter; if all the county's butter went to Cork, Kerry may have accounted for as much as one third of Cork's supply.

Even here the supremacy of dairying began to be challenged after 1800 with the advent of new local markets for wheat and barley: by 1814 there were six flour mills and three breweries in the neighbourhoods of Killarney and Tralee, and they were recognised as having initiated 'the era of tillage' in the county. Beaufort who had visited the Killarney area in 1788 and noted that it was 'but poorly cultivated' found on his return in 1810 that it had greatly improved.

Corkaguiny

The district remotest from Cork offers another striking example of internal contrast in the region. The local soils are not very different from other parts of south and west Kerry — most of the low

134. 'O'Brien's survey' (1968), 92.


137. Beaufort, Travels in 1788 [with later additions], ii, pp.9n., 15 (loc. cit.).
grounds being brown podzolic—and it is almost as mountainous as the
peninsulas to the south. Nevertheless its agricultural development
had far more in common with maritime south Cork: it had a high density
of settlement long before the later eighteenth century, it remained
tillage country throughout the period, and flax culture linked to a
local linen industry developed at a fairly early date. Dingle's
(legitimate) foreign trade since the 1680s had consisted mainly of
butter and hides, but like the intermittent smuggling of wool, these
pastoral commodities were mainly drawn from outside the immediate
district. More important, certainly by the 1750s, was agriculture
and linen, for by then the peninsula was 'esteemed the granary of the
whole county' (although, as we have seen, not a sufficient one), while
its narrow linens were being sent to Cork and 'the lower parts of Munster'.

The dependence of areas such as Killarney on Corkaguiny corn was
obviously no older than the rise of dairying in these deficit areas;
customary tillage practices were intensified, and by the end of the
century, the total arable system of the Carbery coast with an endless
potato/wheat rotation using seaweed and seasand at intervals was
dominant on the northern side of the district. In the southern and
western parishes flax played a greater part, but wheat was the
prevailing corn throughout. It was suggested in 1800 that half of the
cultivated land was sown with it, two-fifths with potatoes and one fifth
with barley or oats. The coming of two flour mills and one brewery

138. Smith, Kerry, p.173. Cf. Reports of the roads... to Kerry, 1760,
f.78 (loc. cit.); [Robert Stephenson], An inquiry into the state
and progress of the linen manufacture of Ireland (Dublin, 1757),
p.190.

139. Smith, Kerry, pp.145n.-6n.

140. 'O'Brien's survey' (1968), 87.
to Dingle in the years following probably had more impact on total output than on the composition of agriculture. 141

Corkaguiny's continuous tillage tradition and its early populousness may have been responsible for its rather striking settlement pattern: at the time when the district was mapped by the Ordnance Survey c.1840, nucleated village settlement predominated to an extent found nowhere else in south-west Munster. 142 The early nineteenth-century practice on the largest local estate, that of Lord Ventry, of combating subdivision by preventing the construction of new houses on farms even where holdings were being partitioned, may be part of the explanation, 143 but it was probably the case that the long-run effect of market forces on the district had been to reinforce rather than to disrupt archaic form of land-holding.

It does not follow from the existence of such internal diversity in the region's farming history that the organization of each type of farming - dairying, rearing, intensive corn production - was unique to each district. Certainly tillage as practised in Fermoy had major differences from that in Corkaguiny, but on the whole it is possible to analyse the structure of the major types of farming at the general level of the region.

The framework of dairying has already been noticed in the context of tenurial relations: the dominance of the system of letting out milch stock in return for a butter rent, and its gradual weakening in the later part

141. Radcliff, Agriculture of Kerry, pp.107-8.
143. Radcliff, Agriculture of Kerry, pp.149-50.
of the century as smaller independent cow-owners emerged. But several questions relating to the wider agrarian context remains.

Under the letting system, the size of dairies (i.e. the herds of cattle under the management of individual dairymen) generally ranged from twenty to forty milch cows, the latter being about the upper limit that could be conveniently milked by one family. This did not alter noticeably in the course of the century where a farm was wholly given over to dairy, but much smaller herds were let out where dairymen were also engaging in other forms of farming. 144 (In the immediate vicinity of Cork, herds were sometimes larger; dairies of sixty and ninety were being offered for letting there in the 1760s, 145 and cow-houses also seem to have been more prevalent, presumably because limited winter dairying made indoor feeding more important.) Milking was, it seems, invariably done by

144. Taking a sample of actual settings and local estimates over the century of dairy lets (outside the city liberties), the average is about twenty-nine cows: memorandum re Mellifont's town, Sir John Meade and John Meade, 17 Jan. 1692, Caulfield MSS 81, pp.5-6 (U.C.C. Strong Room); note of dairy agreement with John Hallaghane, account-book 1724, Lismore MSS (N.L.I. MS 6,528, pp.40-1); Egmont survey, 1744; ref. to Ballybane dairies in Richard Purcell, Kanturk to Lord Perceval, 9 March 1743/4, Egmont MSS (B.L. Add. MS 47,001B, f.55); note on Spittle farm, c.1746, Egmont MSS (B.L. Add. MS 47,008B, ff.68-9); memorandum of agreement, Daniel O'Donovan and John Donohue et al., part of Kilgleny, 1762 in N.L.I. Report on papers in private keeping no.153: O'Donovan papers; account with John Linehan, 1791, Earberry account-book 1788-1809, p.12 (N.L.I. MS 7,403); advertisement for dairy in Muskerry, Cork Journal, 10 Feb. 1755, and for two Castlelyons dairy farms, Cork Chronicle, 3 Feb. 1766; Young, Tour, ii, pp.11,26,60,86,119,122.

145. E.g. a Lower Glanmire dairy being let with sixty cows (Cork Journal, 27 Dec. 1759), and a North Liberties dairy being let with ninety cows (C.J. 26 Jan. 1765).
by women, and except perhaps in the Cork Liberties, labour was never
drawn from outside the family to do this. Also, the custom of driving
the cattle at milking time to enclosed 'bawns' or yards, where they
stayed the night 'for the sake of the grass', can only have been
practical with fairly small herds, for the construction of byres by common
farmers was quite exceptional. Apart from these management constraints,
a further influence against large dairies may have been the dairy-owner's
need to spread the risks of dairymen defaulting by letting cows out in
medium-sized herds. And where some form of security was sought from
dairymen for the cattle put in their care, their normally meagre cir-
sumstances would have made it difficult for them to get guarantors to
cover a very large number of cattle.

The normal size of dairies inside the letting system is therefore
fairly clear; the pattern of cattle ownership is more obscure. The
dairy-owners in most of the region were chief tenants; as seen already,
these could often hold several townlands in the earlier part of the
century, i.e. several hundred collops. The proverbial rich man in
the contemporary Munster Gaelic poetry was the fear mále bó, and
1,200 dairy cows seems to have been the ceiling which the Egmont steward
estimated 'some of our people have' in the Orrery/Duhallow district
in the mid-forties. Dairy-masters in this league were probably only

146. Townsend, Cork, p.614; 'O'Brien's survey' (1968), 98;
Questions relative to milch cows and dairy management proposed
by the Farming Society of the county of Cork (Cork, 1809), p.8.

147. William Cooley to Lord Perceval, 15 June 1744, Egmont MSS
(B.L. Add. MS 47,004B, f.74).


149. Cooley to Perceval, 14 June 1745, Egmont MSS (B.L. Add. MS
47,005A, f.68).
common in outlying parts of the region by mid-century. As the average size of holdings let by landowners got smaller, so the huge dairy-owners became rarer, and even if there were 'depopulators' with 800 cows still active in the 1770s they were the exception outside Kerry.

The distribution of cow ownership changed more dramatically as small independent producers became more common. There had always been a proportion of cattle owned by those who milked them, and indeed many dairymen, where they could rear calves, had some of their own stock. Many of the small gneever tenants, even in the early eighteenth century, managed to keep a few dairy stock where there was suitable land. The growth of larger owner-managed dairies was a process as long drawn out as the related decline of the large multi-townland tenant: it more than spanned the second half of the century. This fundamental shift from the old dairy system cannot be precisely documented; it was implicit in many developments, such as the growth from the second quarter of the century of the practice by Cork butter merchants of making seasonal advances to producers: the demand for such loans more likely came from those with bi-annual rent obligations, i.e. cattle-owning farmers who leased land, rather than dairymen who hired stock. A general transition seems to have first occurred in the areas influenced earliest by the recovery in cereal prices - such as Imokilly - to have spread to other grassland areas as they reverted to mixed farming, and to have only reached the dairying parts of Kerry after 1800. However there is a strong suggestion that throughout the region medium-sized cattle-owning farmers were becoming continuously more numerous from the 1740s. And the growing commitment by landlords to smaller lettings from the third quarter of the

150. For the most explicit evidence for the shift, see Beaufort, Travels in 1806-7, 1(ii), p.65 (R.C.B. MS 0/9); Young, Tour, ii, p.274; Townsend, Cork, pp.578-9; Wakefield, Account of Ireland, i, p.323; Radcliff, Agriculture of Kerry, pp.119-20; James Hall, Tour through Ireland (London, 1813), pp.211-2.
century aided the process (but also of course was partly a response to it). Yet the transition was in no way complete even by 1810 and dairy-masters, albeit of more modest proportions, were to survive as a phenomenon in upland and remoter parts of the region until the late nineteenth century.

The size of the independent dairy varied not least because it emerged in a mixed farming context. In the intensely farmed parishes in the western part of Cork liberties the average number of cows per farm in 1798 was about five: no farmer had above twenty cows, but 26% (thirty-five out of 135) held two-thirds of the total number, i.e. an average of about 14.5 cows each. Of these thirty-five, hardly any can have been old-style dairymen, for with two exceptions there were also horses and significant tillage crops on every farm. A few years later the top eleven 'common farmers' around Carrigaline were found to have had an average of twenty-four cows (which were seemingly their own). A retrospective comment on farming towards the end of the century in the Macroom acrea suggested that every farmer was possessed of fourteen to twenty milch cows.

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151. E.g. Townsend, Cork, p.578.

152. Donnelly, Nineteenth-century Cork, pp.142-5.

153. Survey of Carrigrohane etc., 1798. If all holdings of ten or more cows are taken, this would cover 25.7% of all the farmers in the sample (175), who were in possession of 66% of all the cows enumerated. The returns are somewhat rounded.


155. J. O'Callaghan, Usury, or interest proved to be repugnant... (London, 1825), p.135. Cf. Townsend's suggested average of forty cows per farmer in Imokilly (Townsend, Cork, p.614), although it is not explicit whether this referred to independent dairies. In 1786 J. B. Bennett depicted scullóg farmers as typically having ten to twelve milch cattle ('Fifth letter to the people by a Dublin shopkeeper' in Hibernian Chronicle, 23 Jan. 1786).
Dairy herds under the letting system were usually set annually from Lady Day, with an agreed number of cows or in-calf heifers that had been bulled the previous summer. As we have seen, the dairymen's responsibilities were to mind the cattle, to milk them and to churn the butter. In the first half of the century the prevailing practice was for dairymen to hand over in instalments a hundredweight of butter per cow to the dairy-owner, or to deliver such an amount to Cork and return him the receipts; there was the additional rent for 'privileges' (horn money) charged on each cow and paid off in labour. Before mid-century this system was paralleled by one in which cows were let wholly at a cash rent, and by the 1770s, in co. Cork at least, this latter mode predominated (although the butter/horn-money type of agreement survived even in north Cork into the nineteenth century). It was presumably more convenient for the dairyowner to have a completely cash rent, for it can hardly have been in the dairymen's interest, given the annual nature of dairy agreements and the fluctuations from year to year in butter prices. Under this system, cows were let at roughly 50% above the average price of a hundredweight of butter at Cork in the previous year. The price was much higher within a few miles of Cork city and in the neighbourhood

156. For an early example of cash payment for cattle, see account of the sub-rents of Ballylinen, Ballymacart etc. (Decies), 1738, Villiers Stuart MSS F/3. For instances of it around Bantry in the mid-sixties, see account-book and rental 'C', 1765-76, pp.14,46, Bantry White MSS.

157. In Young's travels across the region, he noted dairy lettings in cash on ten occasions, three in cash or kind, and one in kind only.

158. E.g. note of dairy setting to John Creen, March 1806 in account-book of John Purcell 1793-1806, Ryan Purcell MSS (Cork Archives Council); Radcliff, Agriculture of Kerry, pp.118-9.

159. See letter in Hibernian Chronicle, 20 March 1775.
of towns (chiefly because of the milk market and the supply of grain waste). Given that most cattle (outside Kerry) were producing about a hundredweight of butter p.a., the 50% loading, equivalent to corn money under the old system, covered the privileges: the house, a garden (an acre or two for potatoes and cabbage, which might be initially manured by the dairy-master), and one or two collops for every ten cows in the dairy and usually the right to rear some or all of the calves. Sometimes the 'garden' could be as large as four acres, and a regular potato/cereal rotation was possible; dairymen in this position were as well off as small gneevers.

The dairy-owner had of course certain responsibilities. Firstly there was the job of actually acquiring cattle: a regular trade in two-year-old heifers grew up, based on the autumn and early spring fairs, supplied from within co. Cork, from Kerry and from Limerick (if not further afield), and from these dairy-owners could make up their herds, often buying with the proviso that the heifer was a genuine 'springer' and would calve. Not surprisingly some dairy-masters sought to avoid

160. Cf. Burke, 'Eighteenth-century Cork', 77-80, where the rates for dairy lettings cited in Young are related in the first place to a distance factor; Burke argues that transport costs alone do not explain the decline in rates away from Cork city, but suggests that the extra advantage in proximity to Cork lay in the greater contact between producers and itinerant butter-buyers who were prepared to make cash advances. It seems far more likely that the factors cited here explain the higher near-urban rates; even between the immediate city zone and the outer liberties there seems to have been a considerable variation in rates (see Notice re dairy rates, c. 12 March 1798 (S.P.O., Rebellion papers 620/36/14).

161. E.g. account with John Linehan, 1791, Earberry account book 1788-1809, p.12 (loc.cit.) For privileges in relation to calves, see above, chapter iii, footnote 230 and 231.

162. Ibid.; ní Chinnéide, 'New view of Kerry', 86.
dependence on fairs for maintaining their dairies by rearing on their own account, through renting mountain farms nearby on which they placed their yearlings, or through setting them to upland herdsmen in other districts for two years. Once the full complement of cows - based on the estimated grazing capacity of a farm - was made up, the dairy-master could still have problems; cattle might not calve, might be injured or sicken, might go dry. Some dairy contracts placed the onus on the dairyman to replace all losses, to take his chance in effect, but the more common procedure was for the dairy-owner to agree that if any cow could not produce an agreed output of milk during the season, the rent would be adjusted or the cow replaced. It is less clear what happened in cases where the cattle were stolen, or suffered injury or disease, eventualities which to some extent could be blamed on a dairyman's negligence. The frequency of complaints about defaulting dairymen strongly suggests that normal practice was to put most of the responsibility on the dairyman. If all went well, cows usually had a three to five year milk-producing lifespan, yet one dairy-master, weighing up the various factors, claimed that dairies 'must [be] replenished every year with a third part, sometimes half of new milch cows, and the strippers sold for about half the money they cost ... the year before, - there are also vast casualties that cows ... are subject to, as deaths by various distempers as well as by poverty and many lost in bogs, clefts and mountains ...'. Another dairy-master's


164. E.g. note of dairy agreement with John Hallaghane, account-book, 1724, Lismore MSS (loc.cit.).

165. Memorandum of agreement, Daniel O'Donovan and John Donoghue et al., part of Kilgleny, 1762 (loc.cit.); Young, Tour, ii, pp.26-7, 122.

166. John Kelly to Earl Grandison, 20 Oct. 1738, Villiers Stuart MSS C/8. A 'stripper' was a cow (as opposed to a heifer) that had not calved properly and was therefore usually dry.
estimate of hidden costs reckoned that every year one-fifth of his cows were strippers, at least three out of fifty died and that a sixth of all obligations of dairymen would never be paid, although the last calculation at least was regarded by an agent reviewing these estimates as a gross exaggeration. When old cows were phased out they could be quickly fattened by the dairy-owner for sale in Cork, to be made up as poor-quality 'French' beef. The appearance of such old cows at fairs as stores suggests however that many dairy-owners did not themselves have feeding ground available. At times when French beef prices were depressed, as in the early years of the American war, old cows were held back for an extra year or two.

The dimensions of the various trades - of calves and yearlings being sold out of the dairying areas, of heifers into them - altered over time. Thus Kerry, before its dairying intensified, was clearly well placed to rear Cork calves. But by the end of the eighteenth century, Kerry itself having become a major dairying area and Cork more mixed in its farming, this trade was almost certainly less important. The growth of the smaller producer in Cork brought with it a greater tendency for the local rearing of a proportion of calves; in the Castletownroche area Young found that

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168. John Purcell, Cork to Lord Perceval, 28 Nov. 1746, Egmont MSS (B.L. Add. MS 47,008B, f. 85); Richard Hutchins to [Richard Supple], 14 Sept. 1779, Brook MSS (P.R.O.N.I. T2,975).

169. Cf. Thomas Winder to John Foster, 18 Nov. 1779, Foster MSS (P.R.O.N.I. D562/8,631). High butter prices for much of that period also helped.


171. Townsend, Cork, p. 581 (yet even in the district Townsend reported this, there was also some buying in from Limerick: ibid. p.582).
one calf was being reared for every two cows, with presumably the male calves being quickly disposed of.\textsuperscript{172} In Kerry, O'Brien estimated in 1800 that one calf was reared for every three cows, and that two calves in seventeen were sold out of the county as yearlings, the others being held till they were springers; nearly all of these must have been absorbed into local Kerry dairies if stocking levels were to be maintained.\textsuperscript{173} Even after 1800 the stock of many of the dairy farmers, particularly in the south of the region was noticeably smaller and nearer the old Irish breeds than in north Munster, which implies that the inflow of heifers from other regions was not all important.\textsuperscript{174}

The dairy contract was for a full year, so the responsibility for feeding cattle through the winter fell on the dairyman. The grass season was of course long but for several months fodder was necessary, and this usually took the form of hay. Generally dairies were let with meadow ground, but in some cases dairymen were instructed to harvest hay from meadow in the hands of the dairy-master.\textsuperscript{175} Meadow ground was generally that part of a farm where grass was lushest; it would be fenced off about May Day, and the one crop of hay scythed in July and August.\textsuperscript{176} The stock of fodder was generally sufficient to bring cattle through most winters without actually

\begin{itemize}
\item \textsuperscript{172} Young, Tour, ii, p.12, 274. Cf. Townsend, Cork, p.546; Hall, Tour, p.212. The only recorded veal production was in east Imokilly: Townsend, Cork, p.614.
\item \textsuperscript{173} 'O'Brien's survey' (1963), 98; O'Brien's reference to 10,000 cows being sold annually at fairs, was presumably meaning old cows to be fattened.
\item \textsuperscript{174} Cf. Townsend, Cork, p.607; Wakefield, Account of Ireland, i, pp.336, 340.
\item \textsuperscript{175} Memorandum of agreement, Daniel O'Donovan and John Donohue et al., part of Kilgleny, 1762 (loc. cit.); Radcliff, Agriculture of Kerry, pp. 75, 118.
\item \textsuperscript{176} R. Conron, Tralee to Berkeley Taylor, 13 March 1718/9 Egmont MSS (B.L. Add. MS 46,984*, p.40 [N.L.I. Mic. p. 4, 675]); William Cooley to Lord Perceval, 18 July 1746, Egmont MSS (B.L. Add. MS 47,005B, f.65).
\end{itemize}
impairing their health, but the weakness of cattle in the early spring months was proverbial. An active trade in hay developed at an early stage. Riverside farms and those with calcareous soils were more likely to have a surplus, while upland farms seen to have had a constant hay deficit: in severe winters, cattle mortality was always greatest there. Substitutes were developed: furze as well as being the standard hedge plant, was the source of cattle fodder (although used more widely for horses) along the meadow-scarce coast, while in the Kerry hills, natural 'fenane' grass was harvested. Barley straw was also used, although not before the custom of burning the high stubble - still common in the 1740s - had died out. And as will be seen, the new green crops began to be of importance in a few districts towards the end of the century.

Dairy-owners in many cases provided houses for their dairymen, and such 'dairy houses' had a room where the milk was kept; presumably with houses went some of the necessary butter-making utensils. Butter was most commonly made by the 'bonnyclabber' method; the milk was laid in shallow bowls (pecks) for several days 'till the cream comes off, by taking hold of it between the fingers, like a skin of leather, and some till it is mouldy ...'. The cream was churned, the resulting butter salted and kept in 'keelers' till barrelled in firkins for market. The residual sour butter-milk, the

177. Townsend, Agriculture of Cork, p.57; ní Chinnéide, 'New view of Kerry', 88.

178. Smith, Kerry, p. 88n.; ní Chinnéide, 'New view of Kerry', 86.

179. Sir Richard Cox, A charge delivered to the Grand Jury at a general Quarter Session held for the county of Cork at Bandon-bridge, 13 Jan. 1740 (Dublin 1741), p.21; 'O'Brien's survey' (1968), 95.

180. See Chapter III, footnotes 228 and 229.

181. Young, Tour, ii, p.122; Radcliff, Agriculture of Kerry, pp. 121-2.
bonnyclabber, was the staple milk diet for the majority of the population. Where there was an urban demand for fresh milk, unsour skim was produced by fresh churning. The hand-operated dash churn was normally used, although manual and water-powered barrel churns were not unknown. One dairyman near Dripsey who was selling both butter and skim milk in the 1790s was supplied by his dairy-master with the appropriate equipment: a milk cart, three hand churns, and assorted keelers and milk cans.

A universal concomitant of dairying by the end of the century was pig keeping; indeed it was one of the ways by which a dairyman could hope to profit by his farm. Pigs were by no means restricted to cow-keepers, but whereas labourers and smaller farmers in tillage districts reared one to two pigs, considerably larger numbers were kept by dairymen, and it was they who held the breeding sows. The pig and the dairy were complementary because sour milk, specifically the lower layer of bonnyclabber, was found to be an excellent feeding stuff. It had not always been the case: pork exports from Cork were fairly modest before the late 1750's. However, from the time of the Seven Years War the trade became much larger and expanded gradually thereafter (see App. table xiii). On the farms of Castlemagner surveyed in 1744 there had been 1.2 pigs per house and approximately one pig for every five cows. Apart from the case of one dairyman who held with his twenty cows ten pigs, it would seem that most swine were kept for subsistence purposes. Three decades later Young found a different position in Imokilly and north Cork: around Castlemartyr, he was told that dairymen reared eight to ten pigs (i.e. approximately one pig per three cows), while around Castletownroche, he reported that dairymen were rearing a pig for

182. See advert. for Mount Mary in Hibernian Chronicle, 9 May, 1782.
184. Wakefield, Account of Ireland, i, p.353.
185. Radcliff, Agriculture of Kerry, p.122.
186. Egmont survey, 1744.
every cow on the farm, and at neighbouring Mitchelstown he was struck by the general profusion of swine. In fact a one-to-one relationship was probably somewhat of an exaggeration, because even in the western liberties of Cork in 1798, where very high pig numbers might be expected, there were two pigs for every three cows, 3.7 pigs per farm.

If sour milk was the dominant swine feed, it was not the only one; potatoes and cabbage were found to be economic too, and thus in tillage areas and among labourers who lacked cattle one or two pigs could be reared. In some cases final fattening was done by dairymen, but this was not general. By 1800 it was the marginal districts where dairying continued strong, and where potato culture was dominant, that attracted particular attention as pig-producing areas.

The pattern of dairying therefore underwent a series of changes as output grew. The final question must be whether these were accompanied by any fundamental improvements in yields. At first sight it would seem they were not: throughout the period where dairymen were paying in kind the amount agreed to was generally one hundredweight of butter per cow. Such implied stability is surprising in the wider context of livestock production; there was a history of the importation of English breeds of cattle going back to the early days of the Munster plantation. It is of course possible that pre-eighteenth-century cattle imports had proportionately greater impact than the more publicised new breeds introduced in the later part of the century: whether native breeds would have been capable of producing the standard hundredweight remains doubtful. Late eighteenth-century descriptions of old and new breeds seldom rated them in terms of their annual butter production; weight or daily milk output were the usual measures, and in dairy contracts where guarantees were given of a cow's performance over a season they related only to milk yield. From such evidence it seems likely that there was

187. Young, Tour, ii, pp. 13, 60, 275.
188. Survey of Carrigrohane etc., 1798.
189. Memorandum of agreement, Daniel O'Donovan and John Donohue et al., part of Kilgleny, 1762 (loc.cit.); Young, Tour, ii, pp. 26-7; Townsend, Cork, pp. 211, 547, 579.
some rise in milk output towards the end of the period, but as no account was usually taken of butterfat content or lactation period, this does necessarily indicate a rise in butter yields. Similarly there seems to have been a growth in the average weight of milch cows, and this need not have caused a proportional growth in milk or butter output.  

Heavier milch cattle were a by-product of more dramatic changes in beef production. As the export trade in salted beef expanded the native Irish middle- and longhorn cattle were crossed with larger English breeds; the centres of this selective breeding were north Munster and, to a lesser extent, east Connaught. By 1740 the cattle of County Tipperary appeared to one observer 'remarkably large and stately'; a generation later Young reported a one-sixth increase in fatstock weight over the previous twenty years in part of the same county; in 1813 it was claimed that Limerick bullocks were on average more than double their weight of forty years previously. The latter claim was certainly an exaggeration, but the trend is clear: five-year-old fattened bullocks in the early eighteenth century had been on average somewhat under five hundredweight, whereas by 1810 they seem to have weighed (at the same age) around seven.

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190. Townsend, Cork, pp. 311, 579; Radcliff, Agriculture of Kerry, pp. 5-6, 118; H. Townsend, 'The Parish and Union of Kilgeriff' in W. S. Mason, Statistical account, or parochial survey of Ireland (Dublin 1814-9) ii, p.314; J. O'Donovan, The economic history of live stock in Ireland (Dublin 1940), pp. 111-2.

191. Description of Co. Tipperary [c. 1740], Lodge MSS (Armagh Public Library).


193. Munster Farmers' Magazine, ii (1812-3), 158.

194. Cf. copy, [Richard Hare] to Roger Scully, 27 Sept. 1771, Hare letterbook 1771-2 (Cork Archives Council); Young, Tour, ii, pp. 260-1; Wakefield, Account of Ireland, i, pp. 390, 750-1; O'Donovan, Live stock in Ireland, p. 111. Petty had assumed fattened oxen of English breed of six years weighed up to 7 cwt. in 1672, but like his other livestock data, this seems rather high (cf. Petty, Political Anatomy (1719 ed.), p.53.
improvement was achieved on the initiative of graziers and landowners outside the dairying districts, but the inter-regional flow of calves and heifers was sufficient by the late eighteenth century to affect cow size in the Cork region. A number of the new crosses such as that from the Staffordshire longhorn were distinctly less efficient milk producers than the cattle they replaced, while others had proportionate milk yields but shorter lactation periods; the Devon had lower yields but a high butterfat content. Of many it was observed that they were less adaptable to winter conditions than 'native' stock, and less resistant to disease. 195

The dairy stock that the new imports were modifying consisted in the main of lowland, mainly middle-horn cattle, of no precise colour and of indeterminate origin, which before fattening cannot have been more than three hundredweight. These were distinct on several counts from the smaller, black Kerry breed but, like it, were popular because of their proportionately high milk yields and their tolerance of winter malnutrition. 196 The Kerry survived longer in near pure form, 197 but the traits of both dominated the cattle stock of upland Kerry and Cork south of the Lee well beyond the period. 198 In contrast, other parts of the region were heavily influenced by the new breeds, and cattle size and shape in north and east Cork, and lowland Kerry were undoubtedly changing. Some of


196. Kerry cattle were only reckoned to give ½ cwt. p.a. by O'Brien ('Survey' (1968), 97), but their stocking ratios — insofar as the coarse upland and rich lowland can be compared — were higher.

197. The oft-repeated assertion of the demise of the pure Kerry breed (e.g. 'O'Brien's survey' (1968) 92-3; Radcliff, Agriculture of Kerry, p. 145) missed the point that an 'impure' Kerry survived in spite of limited cross-breeding.

the new longhorn crosses, notably the Leicester, Holdnerness and 'Dutch', do appear to have had beneficial effects on butter yields; Dutch or half-Dutch cattle, introduced in the 1750s and 1760s may have been exceptional in that they were imported (by landowners and dairy-owners) more for their milking than their beefing qualities. From them 1.5 or 1.75 hundredweight may have been normal. The absence of dairy contracts specifying payments of more than one hundredweight of butter is probably deceptive, for the areas where improved breeds were introduced were also the districts where wholly cash-based dairy contracts and independent owner-producers appeared first.

* * *

Given the ebb and flow of tillage over the century it might be expected that there would be major discontinuities in the practice and organization of agriculture. In fact the reverse is truer; in spite of the contraction of cultivation in many districts by the third quarter of the century, the subsequent expansion of production was accomplished without any technical or structural revolution. The observation of 1707 that 'no

199. For references to Dutch cattle, see cattle sale adverts. for Charleville herd (Munster Journal, 4 Feb. 1750/1); at Mallow (Cork Journal, 17 May 1756) and at Cork itself (Cork Evening Post, 1 Oct. 1767), and the comment c. 1816 in Journal of the Royal Agric. Society of England, viii, 6 quoted in O'Donovan, Live stock in Ireland, p. 180. For references to the Holderness cross, see Young, Tour, ii, p.27; Townsend, Cork, p. 579 and O'Donovan, Live stock in Ireland, p. 180. The origins of the Limerick (or Leicester) cross is less clear, but it seems to have been a popular dairy animal (Townsend, Cork, p. 447; O'Donovan, Live stock in Ireland, pp. 176, 179).

200. Radcliff, Agriculture of Kerry, pp. 118, 123, 192; Townsend, Cork, pp. 579-80. (In the latter it was stated that Holderness crosses gave the equivalent of five to six gallons of milk; if it is taken that such might be the average over ninety days, and that three gallons of milk made a pound of butter, this would have produced about 1.5 cwt. p.a.).
man gets by ploughing, but he that holds the plough was to remain true: tillage production was always the concern of the small tenant. Admittedly partnership tenure seems to have been more prominent in the early part of the century, single farming tenants employing labourers more normal in the later period.

There was however one fundamental innovation, but it predated the tillage revival, its origins stretching back well before 1700: the introduction of the potato. The radical disagreement of modern historians concerning the timing of the potato's adoption over the country - ranging from the view of Prof. Salaman that it had become the staple diet of the majority by the 1630s to Prof. Cullen's belief that the potato did not achieve this position until the early nineteenth century - has partly arisen because of the inconsistency of the evidence: on the one hand there is the litany of travellers' comments from the late seventeenth century that the dependence of 'the Irish' was on a mainly potato diet, while on the other there is the eighteenth-century record of massive grain imports in years of domestic harvest failure, and short-term economic fluctuations apparently linked to cereal harvest conditions.

The region has been generally recognised as the area where the potato was first introduced, probably in the early seventeenth century (although the role of Sir Walter Raleigh in this is uncorroborated); it has also been suggested that whatever the timing, its acceptance was swifter in Munster than elsewhere. A number of the early references to the prominence of

201. William Taylor to Sir John Perceval, 11 Aug. 1707, Egmont MSS (B.L. Add. MS 46,978* [N.L.I. Mic. p 4,674]).


203. E.g. Connell, Population of Ireland, p. 129; Cullen, 'Irish history without the potato', 77.
roots or potatoes in the diet of the common Irish come from the pens of men closely associated with the region - Vincent Gookin in the 1650s, Petty in the 1670s, John Hovell in the 1690s, Francis Brewster in 1702. Nearly all the early specific references to potatoes in the province - whether around Askeaton castle in 1641, in the liberties of Kinsale in 1665, or on the Perceval/Egmont estate prior to 1690 - used the phrase 'potato gardens'; from these and other comments it seems fairly certain that potatoes were a popular vegetable supplement for the poorer sections of the local community before 1700; certainly they were grown in sufficient quantities by 1700 in Murragh parish (Kinalmeaky) 'and in all this country' [i.e. district] to be worth levying tithe upon. However as a garden crop, the potato's diffusion inside the region may have been largely limited to areas of settlement disturbance: there is no early evidence of the potato in Kerry, and every indication that spring corn was the normal basis of subsistence throughout the seventeenth century.

The graduation of the potato from being a supplemental food source in 1700 to a mainstay of the rural economy three generations later can be viewed from two angles: first dietary patterns, secondly crop rotations.


206. Brady, Clerical and parochial records, i, p. 221.

207. Shelburne surveys, 1688 and 1692, Orpen MSS (loc. cit.); M. Hickson, Selections from old Kerry records, historical and genealogical, 2nd ser. (London, 1874), pp. 31-6; O'Sullivan, 'Molyneux's geographical collections', 37.
When the Englishman, John Stevens was travelling from Bandon to Cork in 1689, the only feature that caught his notice was settlements 'such as consist of ten or twelve poor cots or cabins, inhabited by the miserable country people who live only upon their potatoes and sour milk',\(^{208}\) and even if Stevens is not the most reliable reporter, this is the earliest observation in the region of the dietary combination that was frequently stated in the eighteenth century to be the standard fare of the 'cottier', i.e. the small joint tenant and the labourer; for instance a head-tenant in 1732, to underline the modest expectations of a prospective undertenant in the profitability of a farm, spoke of him as one 'who would be satisfied to get potatoes and sour milk by it ...'\(^{209}\). Certainly by the second quarter of the century, the evidence at first sight would suggest that most rural households were dependent, to a greater or lesser extent, on the potato: at the time of the corn famine of 1728-9 Viscount Perceval (who had not been in Ireland for more than a decade) assumed that his undertenants would suffer less than urban inhabitants, 'they not eating bread but potatoes'.\(^{210}\) With the destruction of the potato crop (still in the ground) in the Great Frost of winter 1739-40, the general reaction was that the staple of the poor had been lost: 'if no potatoes remain sound for seed', wrote Richard Purcell, 'I think the frost the most dreadful calamity that ever befell this poor kingdom';\(^{211}\) one newspaper correspondent from Mallow declared

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that the fact that corn had also suffered was not relevant to the three-quarters of the population that never tasted it.²¹²

There are however many indications that the consumption of potatoes and of oats were closely related. A deficiency in one would affect prices in the other: in 1721 the failure of the local potato crop was expected to make for very high corn prices in the following spring,²¹³ while in 1728/9 the poor corn crops and great export of what was harvested to more precariously placed regions caused potato prices to quadruple.²¹⁴ In turn the loss of potatoes in the Great Frost made William Taylor predict (correctly) in January 1740 that as a result corn prices would be 'excessively dear'.²¹⁵ In fact oats (spring corn) seem to have remained of importance to most sections of the community for part of the year until much later in the century, potatoes were the centre of the diet until 'towards May', while spring corn was categorized as 'the food of the poor' for the summer period.²¹⁶ The disastrous corn harvest of 1744 was therefore expected to


²¹⁴. Rye, Considerations on agriculture, pp. v-vi.


cause a famine in the summer of 1745 but because of imports, grain prices fell and by June 1745 Richard Purcell noted that 'our poor are better off than I some time ago thought they could be this summer'.

The survey of farms in the Castlemagner parish in 1744 might however, seem to support the case for believing that some households were already completely dependent on the potato for subsistence: there was no corn cultivated that year on almost half the denominations, and the total area under potatoes actually exceeded that under corn; the average potato acreage of 1.38 acres (stat.) per house, 0.37 acres per person, could have been almost sufficient to feed families around the year. However, it would be rash to take this survey as a guide to the general situation; it was done in the district where the development of dairying was probably most intense, and in a year that was hardly typical: the low grain prices of the previous two years and the statute against burning land of 1743 were strong temporary disincentives to cereal production. The potato acreage in this sample is nonetheless impressive, and it seems probable that in the lowland dairying districts the cultivation of corn for subsistence was weak by mid-century. But even if many dairymen and labourers were not raising corn crops, employers could, and frequently did, advance them corn in the summer months.

217. Purcell, Kanturk to Egmont, 30 April, 14 June 1745, Egmont MSS (B.L. Add. MS 47,010*, pp. 122, 145 [N.L.I. Mic. P4,679]).

218. Egmont survey, 1744. This acreage p.c.a. is higher in fact than that estimated for 1841 by P.M.A. Bourke ('The extent of the potato crop in Ireland at the time of the Famine', in J.S.S.I.S.I. xx (1959-60), 1-19), but of course such a comparison overlooks the possibility of changing yields.

This became noticeably less common during the last third of the century. It was in fact only during the latter period that the eclipse of oats (and, less importantly, barley) as summer food for the small farmer and labourer really occurred. There were several factors accounting for this final shift. The first was the erosion of the economic position of the rural labourer: sluggish wages and higher rents eroded the amount of land they could manage to take and pay for by their family's labour in the course of the year. Tillage was hardly viable on acre (Irish) plots, and in the place of corn more intensive crops such as cabbages and kale were used as the stop-gap between May and August. The second influence was the diffusion of the hardy and durable potato known as the apple; varieties that would keep (under optimum conditions of storage) 'till potatoes come again' were known as early as the 1720s - the popular 'black' potato for instance - but they were easily frosted, whereas the apple potato 'far exceeds all other kinds in the important article of keeping', and was affected only by the harshest winters. It seems to have spread during the

220. Oats appear in the labourers' accounts of 1777-8 and are absent in them for 1789-92 in Carey MSS ('Strawhall file', U.C.C.). N.B. Some labourers and dairymen were still growing corn on their plots at quite late dates: cf. report on labourers, week ending 8 Sept. 1764, Shannon MSS (P.R.O.N.I. D2,707); account with John Linehan, 1791, Earberry account-book 1788-1809, p. 12 (loc. cit.).

221. Mockler's 'Mallow in 1775', 23-4; Young, Tour, ii, p. 13; Hibernian Chronicle, 4 March 1779.

222. Rye, Considerations on agriculture, p. 48. See also comments on potatoes lasting through the summer in Richard Purcell, Kanturk to Egmont, 22 Feb. 1739/40, Egmont MSS (B.L. Add. MS 47,005*, pp. 22-3 [N.L.I. Mic. p 4,679]); William Cooley to Lord Perceval, 19 Feb. 1747/8, Egmont MSS (B.L. Add. MS 47,006,f.8). However the rarity of summer-long survival is implied in the diary of Joshua Wight, 1752-6, entry of 24 Aug. 1755 (loc. cit.).

223. Townsend, Cork, p. 212.
1770s, and although Young mentioned it only once in his travels through the region it was sufficiently preponderant by 1784 for a Cork newspaper correspondent to urge 'the poor' to diversify the varieties they used in view of the fact that the apple had suffered in that winter.\(^\text{224}\) Retrospectively Townsend saw its coming as crucial, for although conceding that potatoes had been introduced at an early date into co. Cork, he believed that they 'did not constitute a material part of the peasants' subsistence until long after. Oaten food was the principal food of those times, and continued to be used in spring and summer even in the southern parts of the county, until supplanted by the apple potato, so famous for its keeping quality'.\(^\text{225}\) The third factor reducing the dietary importance of grain was the recovery of corn prices from the 1770s, and the consequent growth of exports: the massive trade in oats, was seen to have removed oatmeal from the diet of 'the poor', who had till then, enjoyed it 'for some part of the year'.\(^\text{226}\) Higher prices would have made grain too expensive for those such as labourers and the urban poor who had bought it in summertime from their employer or in the market; also, the new demand presumably tempted the smaller corn producer away from consuming even a part of such a highly saleable commodity.

These factors influenced the diets of labourers before those of small farmers, and although by the 1780s it was confidently stated that the particular Munster dependence on potatoes meant that nine out of ten in the population relied almost wholly on them, yet it is unlikely that most farmers


\(^{225}\) Townsend, Cork (1815), ii, p. 125. This comment does not appear in the 1810 edition.

\(^{226}\) Cork Gazette, 17 Dec. 1794.
had completely abandoned corn consumption. Indeed insofar as potato dependence was a 'badge of poverty', increased farm profits for many by the turn of the century may have brought greater variety of diet: farmers east of Cork city were reported to have switched to a part-wheaten bread diet from the time of the potato failures of 1800-1. Yet south of Cork city, a survey of 1806 reflected what was probably the more general situation after the turn of the century: of forty farms surveyed, about thirty-six subsisted 'almost wholly' on potatoes and milk, the remainder 'chiefly' on them. Similarly in Duhallow in 1810 potatoes and milk were 'the principal food of ... even farmers worth from fifty to one hundred pounds per annum', oatmeal bread having fallen into disuse, although a gruel of meal and water was consumed in place of milk during early spring before calving time. After the wars a local observer lamented the complete dependence 'now' of the farmer on potatoes, the decline of the art of cooking and the decay of the rural grist mills. But it is clear that the farmer still enjoyed a variety of 'kitchen', i.e. supplements to a potato diet, - milk, fish, cabbage and sometimes salted meat - which were increasingly beyond the reach of the labourer, rural and urban.

Thus the adoption of the potato, for all its attractions of economy of land-use and reliability in a moist, cloudy habitat, was both long-drawn-out and complex. And just as its consolidation as the major rural winter food should be distinguished from its much more complete dominance after

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227. 'A southern clergyman', A vindication of the conduct of the clergy who petitioned the House of Commons against two bills relative to tithes (Dublin, 1788), p. 25n.; Hibernian Chronicle, 13 Feb. 1783, 9 Nov. 1789. However compare against these, O'Callaghan, Usury, p.135.


229. Wakefield, Account of Ireland, i, p.252.


231. Townsend, Cork, p. 415; Munster Farmers' Magazine, vi (1818-9) 115.
1800, so in its cultivation there is a contrast between the period when it was exclusively a garden vegetable and the time when it was the standard primary crop in nearly all agricultural rotations. As long as potatoes were no more than a supplemental subsistence item, there was no incentive to cultivate them outside the small garden plots that could be worked by the spade. But they were probably creeping in as a market crop at the beginning of the eighteenth century: in 1710 they were of sufficient importance in the urban diet of Cork city to require a new market site for their sale. And demand from Dublin in the 1720s has already been noticed, activating potato production in the Dungarvan area. Yet their bulk, relative to grain, must have deterred the development - away from water transport - of a long-distance trade in them; the inland market insofar as it existed would have been intensely local. There were other constraints on large-scale production, such as the dung requirement where regular production was sought, and the high labour content in planting and digging out. Yet George Rye in his treatise of 1730 made a point of publicising the rise of the field cultivation of potatoes - 'the Muskerry culture' - in the previous five years, spreading in that time from Muskerry into neighbouring baronies; the discovery was simply that potato beds did not have to be made by the spade, that ploughing trenches was adequate, and that animal dung was not essential to obtain good crops, 'for graffed burnt ground will bring potatoes, dry, large, and well flavoured; now may be seen fields of them, of thirty, forty, or fifty acres'. Cultivation on this scale was to remain exceptional, but it does seem that this period marks the rise of the potato as the normal field crop to break the fallow. This was probably less due to demand considerations - although Rye pointed out what was then perhaps a novel practice, the use of potatoes


233. Rye, Considerations on agriculture, pp. 45, 49.
as pig food - than to excellence of the potato for clearing coarse ground and revitalising existing arable land. As Rye suggested, mere burning was an adequate preparation for potatoes (although it was necessary that lime or seashell should be laid before subsequent cereal crops). On regularly tilled land, burning did not displace dunging, but the potato - prepared by whatever means - gradually established itself as the most common harbinger of what was a fairly rudimentary cereal rotation: one winter crop (usually beer barley rather than wheat in the first half of the century), followed by two, three or more crops of spring corn (oats or, less often, English barley). The potato modified and in some cases displaced the fallow; it also eclipsed the practice of manuring ground being prepared for tillage by folding sheep.

The emphasis in the first half of the century on the usefulness of the gneever or labouring tenant as an agent of reclamation and improvement of coarse ground has already been noticed: potato cultivation in other words remained identified primarily with the marginal producer. It may not have been an inevitable component of every rotation before the resurgence of cereal cultivation in the last quarter of the century, but certainly by then its role was undisputed. Virtually every description of crop rotations in the region from the 1770s to the 1810s began with one or more crops of

234. As a root crop it was more efficient in cleansing soils from the effects of constant cereal cultivation than several years of ley (R. D. Crotty, Irish agricultural production: its volume and structure (Cork, 1966), p. 26).

235. Townsend, Cork (1815), ii, p. 124. For evidence of sheep being folded to prepare land, cf. Thomas Forster to William Snowe, 1 Aug. 1711, Shannon MSS (N.L.I. MS 13, 411/i); Rye, Considerations on agriculture p. 64.
potatoes, and this aspect of crop rotation was not criticised by local improvers: only outsiders sought to replace it with the turnip. And the rise of the grain trade was welcomed by some precisely because it would make more certain an abundance of potatoes, 'a necessary culture preceding corn'.

* * *

The spread of the potato was both the most obvious and most important instance of genuine 'improvement' in eighteenth-century south Munster. It created a more flexible agrarian economy, and as a standard element in crop rotation by the time corn production expanded, it helped in large measure to maintain the moderately high yields prevalent in the region (See Table 5:i). 237

Table 5:i

<table>
<thead>
<tr>
<th>South Munster Crop Yields (per acre stat.)</th>
<th>1775-1811 (average of local estimates)</th>
<th>c. 1845 Bourke's national estimates</th>
<th>1847-51 Average for Co.s Cork, Kerry and Waterford</th>
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<tbody>
<tr>
<td>Potatoes</td>
<td>5½ tons</td>
<td>6 tons (Exceptional)</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>13 cwt.</td>
<td>12½ cwt.</td>
<td>12.125</td>
</tr>
<tr>
<td>Oats</td>
<td>13½ cwt.</td>
<td>13 cwt.</td>
<td>12.66</td>
</tr>
<tr>
<td>Barley</td>
<td>16 cwt.</td>
<td>17 cwt.</td>
<td>16.69</td>
</tr>
</tbody>
</table>


236. Cork Evening Post, 9 Nov. 1789.

237. For contemporary verification of this, see the results of Kearney's experiments on the yield of wheat after (a) a normal fallow and manuring; (b) a crop of potatoes equally dunged; (c) turnips (op. cit. pp. 67-8; 72).
Seed/yield ratios were also reasonably high (by contemporary European standards): estimates towards the end of the period suggest average ratios of 1:9.5 for potatoes, 1:8.6 for wheat, 1:10.6 for barley, and 1:8.8 for oats.238

This rather fragmentary evidence on yields is only sufficient to indicate the absence of massive changes, at least between the 1770s and the 1810s. At first sight this is surprising for, ceteris paribus, average yields should fall as the growth of cereal farming brought agriculture on to poorer grounds and to localities less well placed in relation to natural fertilizers; further, that in a situation where population pressure strengthened the process of subdivision of farms, subsequent diseconomies of scale in production might be expected, which in turn would adversely affect the standards of soil maintenance.239 So it is clear that there were countervailing influences more or less holding yield levels up as output (and population) expanded.

There would seem to be three complementary explanations, each with a different time-scale: in the early stages of tillage expansion the new areas of cultivation, whether reclaimed land or pasture, were at first quite capable of sustaining reasonable crops, even if only burnt and lightly manured; their greater need for nutrient replenishment only gradually emerged. Improved methods of husbandry, even if confined to the better lands were a second factor, helping to compensate for the lower average quality of land under agriculture. Thirdly (and more relevant to the pre-Famine decades) growing economic stress at the lower levels of rural society tended to increase labour inputs per cultivated acre, in the form of more intensive spade cultivation of marginal land, and the greater use of those manures


which could be acquired by family labour. Changes occasioned by the third factor might seem to be 'improvements' and therefore covered by the second factor - insofar as spade-cultivated crops might be maintained with greater care, but the critical theoretical distinction lies between agriculture in which changes in technology raised output and hence increased returns to the total labour force employed, and agriculture in which low expectations of earnings ensured the employment of labour to a point where marginal productivity approached zero. Given the nature of the evidence for our period, it is not possible to determine the extent to which the former was significant; for instance in the case where a local observer of Fermoy agriculture stated that yields of wheat and (by implication) barley had risen upwards of 25% in the ten to fifteen years prior to 1810, the causes given for this - piecemeal improvements in preparation and weeding, better seed and 'greatly increased' use of fertilizers - were, with the exception of seed, not necessarily enhancing labour productivity.

Seed at least is a clearcut case. The potato's rise illustrates both the extent to which new strains of a food crop could be diffused, and the importance of such improvements. Rye named five varieties with which he was familiar in 1730, all but one of which appear to have slipped out of use within half a century; he did not even mention the apple, which although

240. See P.M.A. Bourke, 'The average yields of food crops in Ireland on the eve of the Great Famine', in Journal of Department of Agriculture lxvi (1969), 31. Bourke argues that the fall in potato yields (by about 50%) occurring some years after the Famine itself came when the effects of the high pre-Famine manuring of potato land began to wear off.


predominant by the 1780s, was giving way to the cup potato by the 1810s. Flavour, keeping quality and yield were all factors explaining the sequence of most popular varieties, but perhaps the most pressing reason for periodic changes was the tendency for most strains to degenerate (i.e. to become increasingly disease-prone) without the regular infusion of seed from outside the region. Considering that most potato growers relied for their seed on the smaller tubers from the previous year's harvest, the apparently total adoption of a succession of potato types is somewhat surprising; it makes the possibility of improvement in the seed quality of other more commercial crops far more plausible. Rye's comments imply that at least three varieties of wheat, two of barley and four of oats were known locally in 1730: a wider knowledge of grain types may have been a beneficial side-effect of the major grain imports from Britain and the Continent that occurred in the many years of deficit harvests during the century before the 1770s. Thus 'white Polish' were one of Rye's oat varieties, and its merits relative to east Friesland oats seem to have a matter of more than academic interest. New varieties probably only penetrated down to the small farmer with the growth of the export trade and the expansion of commercial grain processing. The practice of grain merchants, millers and brewers to give out improved (generally English) seed at a premium for local grain or to offer higher prices for specific varieties no doubt helped, although they were presumably seeking improvements in quality rather than yields. Beer barley, a hardy

244. Rye, Considerations on agriculture, pp. 62-3.
246. E.g. Sadleirs in their capacity as grain merchants in Cork (Cork Evening Post, 26 March 1788; 16 April 1792). See also Radcliff, Agriculture of Kerry, pp. 109, 154.
crop and suitable for human and horse consumption, seems to have been giving way towards the end of the century to English and other two-rowed barleys more suitable for commercial malting. In wheat, the red lammas variety had largely eclipsed the small bearded type after 1800: both sorts had been known in Rye's day, but the victory of red lammas was of a commercially more acceptable strain over a hardier but lower yielding one. The same may have been the explanation for the spread of new varieties of oats, such as the potato oat. Given the existence of such changes it was not perhaps an exaggeration that by the end of the period farmers had become more careful about their choice of seed for grain than for potatoes.

Lime and sand had done much to shape the long-run pattern of local specialization; they remained as the main fertilizers in the later eighteenth century, but the manner in which they were used altered. The very fact that lime had so often been classed as an 'improvement' of apparent permanence can be taken to mean either that it was not a regular component of crop rotations or if it was, that cultivation of individual sections of potentially arable parts of a farm was sandwiched between long periods under ley grass. In dairying districts it was largely the latter case; the object was to improve grassland by periodic cultivation, taking about six years from the time of liming for a winter corn till the final object, a good coating of grass, was achieved. In the unpropitious environment for tillage of mid-century north Cork, the profit of a corn rotation after lime was sufficiently unattractive for it often to disappear altogether, and for the direct liming of pasture to develop; in 1748 the introduction of this practice was attributed by the steward of Lohort Castle to the dairy-owning clan of Wrixons:

248. Townsend, Cork, p. 315; Wakefield, Account of Ireland, i, p. 440.
250. Cf. Richard Purcell, Kanturk to Lord Perceval, 9 March 1746/7, Egmont MSS (B.L. Add. MS 47,002A, ff. 82-3).
'the good fortunes those people have made influences the crowd to follow them 
mainly imagining that everything they do leads to the happy ultimatum, 
getting money ... it is astonishing to see how the little people are copying 
them in this inactive method of improvement ...'.251 Over the next gen-
eration this became the most frequent manner in which lime was used in prime 
dairying districts until the tillage recovery.252 The intended permanency 
of the laying out of lime is confirmed by the quantities used, whether in 
reclamation, in the improvement of existing grassland or before a corn 
rotation: generally forty to sixty barrels (six to nine tons) per acre (stat.) 
were laid out, which by modern standards constitutes extreme over-liming 
(4.5 tons per acre is considered adequate for the most acid soils),253 but 
these levels (which partly arose from the impure nature of kiln-burnt lime) 
were popular in the belief that a plant food (as lime was supposed to be) 
to remain active should be applied as amply as possible. 

Towards the end of the century the use of lime and of calcareous sand 
in regular rotations became more frequent; (whether actual quantities per 
acre changed is not clear). Estate policy contributed to this: the cov-
enants in older leases binding a tenant to spread a given quantity of lime 
per acre on land to be tilled may have been frequently ignored at least in 
dairying areas, but the more positive encouragement given to tenants to use 
manure in the later decades of the century (both through newer forms of 
lease agreement, and through the development of quarries and feeder roads), 
allied to the discouragement of burning already profitable land, helped to 

251. William Cooley, Lohort to the Earl of Egmont, 29 July 1748; cf. 
William Freeman, Bath to Egmont [sen.], - Aug. 1743; Purcell, Kanturk 
to Egmont, 24 Dec. 1744, Egmont MSS (B.L. Add. MS 47,013*; 47,008*, 
p. 42; 47,009*, p. 182 [N.I. Mic. p4,679-80]). 
252. Mockler's 'Mallow in 1775', 22; ní Chinnéide, 'New view of Kerry', 94. For the spreading of 'bank sand' on pasture, Young, Tour, ii, p. 39. 
253. M. A. Havinden, 'Lime as a means of agricultural improvement; the Devon example', in C. W. Chalilin and M. A. Havinden, eds. Rural change and 
urban growth 1500-1800: essays in English regional history in honour 
counteract the dangers of soil exhaustion from over-cropping. Also, the
development from mid-century of the Duhallow culm deposits eased the
growing fuel problem which would otherwise have forced up burnt lime costs.
North of the Blackwater, culm was generally being used by the 1770s in lime-
kilns, while in places far from adequate turf supplies, systematic cultivation
of furze provided a tolerable fuel source for kilns. In north-east Cork
the availability of lime gravel compensated for a shortage of local fuel. 254

Seasand for most of the period had not been taken much more than five
miles inland - but it came to be carried further and from a wider range of
shores as roads were improved. 255 And with road improvements, notably in
Carbery, the cart was displacing the horse-pack as the means of bringing sand
inland. 256 The quantity laid per acre was still of course a function of
distance from the coast; by 1810 the better placed lands were getting ten to
twelve tons per acre (stat.) before cropping. 257 And there were the com-
pletely new manures, seaweed and urban waste, and others less geographically
confined: kiln-burnt clay, soap-ashes, composts from ditches and bog mould;
generally these appeared where there was a shortage of more normal
fertilizers. 258

Contemporary agricultural improvers were comparatively uninterested in these
humble matters of seed and fertilizer, but crop rotation and modes of plough-

254. Rye, Considerations on agriculture, pp. x, 18, 22-3; Smith, Cork, i, pp.
337, 356; Mockler's 'Mallow in 1775', 22; Townsend, Cork, pp. 402, 444.

255. Second report of Charles Vallancey, 1777-8, Pelham MSS (B.L. Add. MS
32,118, f.130); survey of Cremorne estate, 1800, pp. 2, 28 (loc. cit);
Townsend, Cork, p.301. Even in Kerry it was being taken five miles
inland: (Ni Chinnéide, 'New view of Kerry', 97).

256. Townsend, Cork, p. 548.

257. Ibid. pp. 301, 548, 582.

258. E.g. (for the use of burnt clay) advert. for Aghada farm, Cork Journal,
29 Jan. 1756; for 'compost', Townsend, Cork, p. 549.
ing received more attention. Yet there was no fundamental alteration in the pattern of rotation to match the earlier inclusion of the potato, but two related changes were important: the length of the rotation and the inclusion of green crops.

It is already apparent that considerable variation existed in customary rotations between district, both the crops sown in the rotation and the duration of cropping lacking any uniformity. Lease covenants usually sought to restrict successive croppings to three, but except where this was enforced the average had probably been up to double this: one or two crops of potatoes, one or two of winter corn, one to four of spring corn. The subsequent fallow varied, depending *inter alia* on whether the ground was to be recultivated at the earliest opportunity (in which case it would seem to have been from two to four years) or led into grass, when the period between harvesting the last crop and the first grass season might be from 1½ to three years. The reports on actual rotations in the region made by agricultural writers between 1774 and 1815 suggest some shift in rotation length towards shorter cycles.

**TABLE 5:ii**

Distribution of contemporary estimates of length of ordinary crop rotations*

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<tr>
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<th>1774-1803</th>
<th>1810-15</th>
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<tbody>
<tr>
<td>2-4 years</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>5-7 and more</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Perpetual</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

* Excluding preliminary fallow and subsequent grasses

Sources: Young, Tour, ii, pp. 9-10, 26, 39, 58-60, 78-9, 272; Townsend, Agriculture of Cork, pp. 39-40; Townsend, Cork, pp. 194, 314, 408, 463, 543, 578, 582, 652; Wakefield, Account of Ireland, i, pp. 391-3, 395-7; Mason, Parochial survey, i, 570; Townsend, Cork (1815), ii, pp. 125, 221; Mockler's 'Mallow in 1775', 26; 'O'Brien's survey' (1968), 88; ní Chinnéide, 'A Frenchman's impression of Cork', (1974), 16.
Such a trend is very plausible given the land-use changes in many districts. It seems unlikely that seventeenth- or early eighteenth-century rotations were any shorter than those of the 1770s. In the Civil Survey of the mid-1650s on Muskerry, where the replacement of liming by seasand was noted because of fuel problems, there was an observation that 'the soil being spent, yields but three crops of corn at each manure'; Townsend's reaction on reading this 160 years later is revealing: 'The casual mention of only three successive crops of corn from one poor dressing to sea sand ... at once accounts for the complaint of worn out ground, and affords proof of the agricultural unskilfulness of those times'.

The introduction of 'artificial' grasses was a phenomenon associated with changes in rotations. Best practice as set out by Rye in 1730 had made no mention of the sowing of grasses at the end of a rotation, but a generation later it was becoming a major element in the improvers' propaganda. The effect of lime in producing a greater trefoil element in subsequent pasture had certainly been recognised, but the nutrient enrichening (i.e. nitrogen fixing) functions of legumes were not appreciated. And even as late as 1794 a local critic of Young, casting him as an irrelevant Englishman, declared that 'in Ireland, being the most grassy country in the world from almost constant rain, artificial grasses are unnecessary, except with the last crop of tillage, that we may then save a year's time, until the natural grass gets up'.

The sowing of ordinary grass seed was not unknown by mid-century, but the use of red clover or other legumes outside

259. Townsend, Cork (1815), ii, p. 124.
261. E.g. advert. for Riverstown farm where 230 acres had 'lately' been laid down with grass seeds, Munster Journal, 2 Nov. 1749; advert. for 100-acre Kilbrittain farm laid down with clover, Cork Evening Post, 2 Jan. 1768; description of Robert Gordon's New Grove improvements in Cork Chronicle, 26 June 1766. N.B. early references to clover may be to the white variety, which was an indigenous trefoil and could appear naturally in limed pasture; it was less valuable than red clover, having a shorter growth which meant it could not be mowed (cf. Kearney, Essays on agriculture, pp. 19-21).
the desmesne was clearly exceptional before the 1780s. Young complained of their absence except among 'a few of the better farmers' around Castlemartyr; the pattern of local clover and grass imports (coming mainly from Britain and Holland) suggests that the major growth in their use only occurred from the late 1780s (see Table 5:iii). As red clover seed (the major component of these imports) was never harvested in Ireland, such figures are an index to its cultivation. Taking as an average sowing fifteen pounds per acre (Ir.) the 1791/2-93/4 import would have covered some 6,820 acres (stat.).

TABLE 5:iii

Clover, trefoil and other grass seed imports 1770/1 - 1812/13 (cwt.)

<table>
<thead>
<tr>
<th>Average of three years ending</th>
<th>Cork imports</th>
<th>% of national total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1772/3+</td>
<td>81</td>
<td>2.5</td>
</tr>
<tr>
<td>1775/6</td>
<td>80</td>
<td>2.0</td>
</tr>
<tr>
<td>1778/9</td>
<td>156</td>
<td>3.0</td>
</tr>
<tr>
<td>1781/2</td>
<td>157</td>
<td>3.9</td>
</tr>
<tr>
<td>1784/5</td>
<td>70</td>
<td>1.6</td>
</tr>
<tr>
<td>1787/8</td>
<td>95</td>
<td>2.8</td>
</tr>
<tr>
<td>1790/1</td>
<td>284</td>
<td>4.9</td>
</tr>
<tr>
<td>1793/4</td>
<td>568</td>
<td>9.6</td>
</tr>
<tr>
<td>1796/7</td>
<td>455</td>
<td>9.1</td>
</tr>
<tr>
<td>1799/1800</td>
<td>346</td>
<td>7.5</td>
</tr>
<tr>
<td>1803/4*</td>
<td>477</td>
<td>3.9</td>
</tr>
<tr>
<td>1806/7</td>
<td>524</td>
<td>5.0</td>
</tr>
<tr>
<td>1809/10</td>
<td>323</td>
<td>2.8</td>
</tr>
<tr>
<td>1812/13</td>
<td>339</td>
<td>4.4</td>
</tr>
</tbody>
</table>

* Year ending on 25 March; * year ending on 5 January

Source: P.R.O. Customs/15.

The subsequent stagnation of grass imports (both in absolute terms and in relation to other parts of Ireland) is puzzling, for although vetch and common grass seed came to be harvested locally, red clover did not; either

262. Young, Tour, ii, p. 60. In reference to a rotation to be found around Dunkettle, Young mentioned 'seeds' which may mean clover: ibid. ii, p.39.
263. Townsend, Cork, pp. 280-1; Wakefield, Account of Ireland, i, p. 467.
the supply of such seed was increasingly handled via Dublin, or else imported seeds, after initial popularity, were replaced by less advantageous ones which could be harvested locally. The use of specifically red clover seems to have been a mainly coastal phenomenon — in Imokilly and the south Cork coast districts — where because of intensive cropping, dung was at a premium and milk scarce; an intensive fodder crop, whether for summer grazing or winter feeding, was more immediately attractive in these circumstances. In Barryroe and coastal Carbery during the 1790s red clover was being brought into the rotations of farmers but the successor crop was not, as improvers sought, wheat but potatoes. 265 Elsewhere ordinary grasses were increasingly sown with the last corn crop in the rotation. 266

There were also changes in ploughing and soil preparation methods. The fact that tillage farming had nearly always been in the hands of smaller tenants might suggest that the spade rather than the plough had been the foremost tool in cultivation. Yet it would seem that most gneever tenants possessed a 'garron', the small Irish horse, using it both for ploughing and as a pack animal. Even in a non-tillage area such as Castlemagner in 1744, there were two horses per three houses: this was after the Burning act which although it discouraged tillage among smaller farmers most, was said to have also had a noticeably adverse impact on horse prices. 267 On the small farms of the western liberties of Cork city in 1798 there were 2.44 horses per farm. 268

The horse and the spade were in fact complementary. Variations of ridge-and-furrow cultivation were used for both corn crops and potatoes which

265. Ibid. ii, p. 60; Townsend, Agriculture of Cork, p. 13; Townsend, Cork, pp. 237-8, 280-7; Munster Farmers' Magazine, i (1811-2), 176.
266. Townsend, Cork, pp. 238, 409, 463, 543, 582, 652.
268. Survey of Carrigrohane etc., 1798. The returns for 1744 and 1798 are not directly comparable, one the average per house, the other per farm.
required ploughing and spadework. Initially the potato when a garden crop had been cultivated by the all-spade process of 'lazy-bedding', where the seed and dung were first laid on a grass strip or bed, then covered by sods turned back from furrows on either side, and finally earthed up by the shovelling of soil from the trenches. But 'the Muskerry culture' from the 1720s introduced the plough to the process: by turning a larger sod, a wider bed was possible with parallel rows of potatoes subsequently set in them; then the plough 'deprived of its boards and parts that turn the sod' broke up the trench soil. Although this was much less labour-intensive, spade-work was still necessary for the two dressings of trench soil placed on the beds. By the later part of the century the true lazy-bed was largely confined to Kerry, while the common method in Cork had evolved from the Muskerry culture: the plough was used to break up all but a centre rib of the potato bed, which could vary in width depending on the depth and richness of the soil. Improvers before 1800 were seeking to replace this in turn by the drilling method which represented the complete victory of the plough: in this process the potato seed was set in narrow furrows and earthed up by subsequent ploughing; certainly it was economical in terms of seed, dung and labour, but its effect on yields per acre were less certain. It was not easily adapted to small-scale production and was unsuitable as the first potato crop in a rotation. Its adoption was therefore slow, although it seems to have become a common practice in some localities before 1815.

269. Rye, Considerations on agriculture, pp. 48-9.
270. Kearney, Essays on agriculture, p. 64; Townsend, Cork, pp. 195, 662.
271. Townsend, Agriculture of Cork, pp. 40-2; Townsend, Cork, p. 278; Mason, Parochial survey, ii, p. 135, Munster Farmers' Magazine, i (1811-2), 53; 'O'Brien's survey' (1968), 82. The earliest reference to the practice is in Young (Tour, ii, p. 75) where he noted it at Coolmore.
Corn had also been sown on ridges between furrows (to aid drainage) and this long predated the inclusion of potatoes in field rotations. Both the ploughing and subsequent processes (e.g. harrowing) generally required the horse, although even here it could be displaced by the spade; sometimes corn was set on ley grass and grown by the lazy-bed method; more commonly it was scattered on unploughed potato beds and earthed up by spade. Such practices were confined to marginal land, especially in Kerry where ploughs were few - Young noted in 1776 that the south Kerry parish of Tuosist possessed no ploughs - and to the culture of oats. Certainly the preparation of winter corn after potatoes needed more careful management; it was necessary at minimum to plough in the seed spread on the potato bed and harrow it. Best practice was to plough up the old bed and sow the grain in new ridges (apparently six sods wide for wheat, and more for oats) or to sow it in drills. The ploughing in of oats - the last crop in nearly all rotations - was only a recent practice in some parts by 1810; it was often not given a subsequent harrowing.

A major reason for the continued combination of plough and spade in cultivation was the fact that for the majority of tillage farmers, ploughing was an activity which involved a measure of meitheal, of pooling the human and material resources of neighbours. The heavy Irish plough of the eighteenth century usually required four horses and three men; the sharing of horses was probably the most important element of this, but implements

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273. Rye, Considerations on agriculture, p. 60.

274. Ibid. p. 60; Young, Tour, ii, p. 60; Townsend, Cork, p. 663; 'O'Brien's survey' (1968), 86; M. Chinnéide, 'New view of Kerry', 85.


could also be borrowed, at least in poorer districts: the position in co. Kerry according to O'Brien in 1800 was that 'none of the working farmers ... keep a team [of horses], and very few of them a plough, often borrowing a plough and tackle in different places, one part in one place and another in another'. The effect of this was to discourage multiple ploughing (particularly during the fallow stage), for the plough 'cannot be had without some obligation to a neighbour'. Thus the spade was substituted where possible.

Yet there were other means of escaping the inconveniences of the meitheal: the change most heartily recommended in the literature of improvement was the replacement of the common plough by the lighter Scotch swing plough. By 1810 this implement was 'very much used in the neighbourhood of Cork', and was spreading into Imokilly; yet because of the initial cost its impact on common farming practices over the region can only have been slight. More significant was the improvement in the quality of the farm-horse, with the introduction of the Berwickshire and other British breeds: again the immediate vicinity of Cork and Imokilly were in the van of innovation, but diffusion seems to have been more general. Strong horses rather than better ploughs were behind 'the wonderful improvement' in co. Cork's ploughing standards which one local writer saw in 1815: 'a few years ago [even] the light soils of the county ... were almost universally ploughed with three, four and sometimes even a greater number of horses, with a man to hold the plough, another to lean on the beam, and one or two drivers ... now in most parts of the county the smallest farmers are found to plough with only a pair of horses and no driver'.

277. 'O'Brien's survey' (1968), 89.
278. Townsend, Cork, p. 192.
279. Ibid. pp. 191, 582, 613; Munster Farmers' Magazine, iv, (1814-6), 78, 151.
280. M.F.M., i (1811-2), 173-4; Mason, Parochial survey, ii, p. 135.
281. M.F.M., iv (1814-6), 157.
Ploughing was thus becoming more economical in labour, but it must be remembered that the distinction between farms mainly using the plough and those relying on the spade remained; it was chiefly a function of size. Along the densely settled Carbery coast, in the south-west peninsulas and in other areas of marginal settlements, the spade remained dominant. An indication of this was the preference in Kerry and south-west Cork for the mule over the horse: where only a pack animal was required, the hardy cross-breed between donkey and horse was more serviceable. 282

There are several further problems concerning land-use arising from this analysis of cultivation practices, specifically the extent to which joint tenants farmed 'infield' on some agreed system, and the relationship of land-use to field size. These are questions which by the nature of eighteenth-century sources almost defy solution. There are however some clues. It has already been shown that the prevalence of joint tenancy on an estate did not necessarily mean anything more than that as a result of the poor circumstances of potential tenants and the small acreages which they sought, a group intending to farm a townland or its equivalent were tied to a simple lease, or had combined to secure one. However such tenancies did reflect farming realities to some extent, because joint tenancy was more common, at least in the later part of the century, in hill country than along the coast: 283 it was more adapted to pastoral than to tillage conditions. Cattle were grazed in common on the 'outfield' in upland areas with shared herding arrangements, but there is no firm evidence of full 'rundale', of joint management, or of periodic re-allotment of the arable land. It is inherently unlikely to have existed given the prevailing forms of tillage, with flexible rotations and long periods of grass on the inland. However


283. Cf. Weld, Scenery of Killarney, p. 163; Wakefield, Account of Ireland, i, p. 254.
because of the traditional classification of profitable land in a denomination into (potentially) arable pasture and meadow, a townland taken by a set of small joint tenants was usually divided by them so that each got a portion of arable, inland pasture (the definition of which was often vague) and meadow. Thus the complaint arose against such tenants that they made 'useless ditches',284 which were possibly no more than baulks, furrows or (in Kerry) loose stone walls, and were in contrast to the type of permanent banked ditches landowners sought. Therefore while there were shared plough teams, there were no 'common fields': when landowners began to arrange the partition of joint farms after the turn of the century, it was not to end a regime of common farming, rather to create compact holdings out of the pre-existing miniature patchwork of inland fields which had resulted from this system and the associated custom of partible inheritance among sons.285

It is doubtful whether there was any parallel reorganization of settlement itself in the period; clustered settlement as such did not imply any joint farming practices.286

When surveyors began to plot field divisions on estate maps in the late eighteenth century, there was a clear contrast between tillage fields and those permanently under grass; on the Devonshire estate in 1775 around Bandon the tillage fields were mostly one to four acres (stat.), those under pasture much larger with some of several dozen acres.287 A quarter of a century


285. See above, chapter iv, p. 268.

286. Townsend, Cork, pp. 204n. -5n.

287. Survey of the Bandon and Western estates of the Duke of Devonshire by Bernard Scalé, 1775 (loc. cit.).
later on the Shuldham estate, set on coarser land some miles to the north-west, arable and pasture formed about quarter of the total land on the estate, and on this portion average field size varied from about 5½ acres (stat.) in Fanlobbus parish to 8.7 acres in Kilmichael. Average farm size on this estate was about 25 acres.²⁸⁸ Around Cork city, average field sizes of eight to nine acres (stat.) and 4.6 acres are recorded for two large mixed farms in the third quarter of the century.²⁸⁹ Townsend when writing about the remodelling of small tillage farms in 1803, took as an example a thirty-acres (presumably statute) farm, divided into seventeen fields: when describing his own baronies of Ibane and Barryroe he took two to three acres as the average field size.²⁹⁰ Only in the tillage country of Fermoy and Imokilly was corn cultivated in larger fields. On the predominantly dairy farms in lowland areas fields probably averaged fifteen to twenty acres (stat.); upland dairies could be laid out in fields up to twice as large.²⁹¹ As the ground being tilled in dairying areas was regarded as a temporary departure from grass rather than as permanently arable, its enclosure (although sometimes required by leases) often meant little more than an ephemeral fence.²⁹² However the pasture-field ditches built by 'improving' tenants, whether dairy-owners, graziers or otherwise, were undoubtedly substantial: the standard kind were some eight to ten feet from trough of the

²⁸⁸. Maps of the estate of A. L. Shuldham by R. Manning, 1801-3 (N.L.I. MS 3,025); see also maps of the estate of Sir Nicholas Colthurst by Thomas Logan and son, 1812, (loc. cit.).

²⁸⁹. Barnhill (advert. in Cork Journal, 28 July 1757); Intricilla (cited in Burke 'Eighteenth-century Cork') 71n.


²⁹². 'O'Brien's survey' (1969), 109. For an example of a standard lease covenant enforcing enclosure of arable, see (printed) lease, Francis Bernard to Samuel Crooke, 20 Jan. 1753, Doherty MSS.
ditch to top of the bank, and were planted with quick-thorn or furze. Such
solidity was necessary, in contrast to English ditches — because 'the cows
in this country being small, and in the spring the grass not plenty makes
them climb over a small ditch more than the great cattle near London'.

Large enclosures in the context of grassland farming were seen by Smith on
visiting Corkaguiny as the key to general improvement: 'enclosure shelters
the land, keeps it warm, preserves the accidental manure provided by ...
cattle, keeps off floods from higher grounds, the trenches drains [sic]
the land, and the owner has his property secured, and kept free from the
trespassing of others: besides ... the land is ... rendered more fit to pro-
duce corn ...'. Such considerations explain the vigour with which the
larger tenants on many estates across the region followed through those
lease covenants which obliged them to enclose the out-bounds (if these were
still open) and a proportion of 'inland'. Thus by mid-century it was almost
certainly the case that the richer lowlands in north Cork, the Lee and
Bandon valleys, and Imokilly were enclosed, even if the 'closes' were often
large. The effect of the subsequent expansion of cereal farming was
inevitably to reduce their size.

Enclosure had of course other connotations. The extension of culti-
vation through the reclamation of coarse land usually occurred inside the
bounds of the townland. But there were a few extensive tracts of upland
lying between two or more townlands which had been totally unsettled and
apparently unprofitable at the period of the Down Survey, at which time they
had been deemed common to the surrounding townlands; most of these anomalies

293. Charles Hay, Lohort to Lord Perceval, 14 Sept. 1744, Egmont MSS (B.L.,
Add. MS 47,008A, f.130); Townsend, Cork, p. 213.

294. Smith, Kerry, pp. 159-60.
were subsequently granted by the Crown on lease or in fee. Some remained and attempts to annex or divide them were not unusually a source of legal dispute between landowners. And where they were divided this might only be to regulate the summer grazing by tenants of different townlands, not to initiate any land-use change. However with rising land values and the extension of reclamation some outland and common grazing areas became increasingly attractive for permanent grassland, to be achieved via enclosure. Such enclosure, whether by a head tenant or landowner, could conflict with 'customary usage' of tenants or undertenants, and was likely to provoke tension. Thus although Young was technically correct in saying that in Ireland there were 'no common rights to encounter, which are the curse of our moors', there seems to have been a popular assumption that certain areas of mountain grazing were reserved as 'royal grants for the benefit of the poor - unalienable from the occupiers of the adjacent lands'.

The precise origins of the Whiteboy disturbances that began in south-west Tipperary in 1761 are obscure, but encroachment on common grazing land appears to have been the initial grievance that led to the systematic levelling of new ditches. The agitation spread along the north-east borders of the Cork region around the foothills of the Knockmealdowns and Kilworth mountains: the 'levellers' were by implication cattle-owning small farmers who had relied on coarse grazing, and the enclosers' large graziers who were

295. Michael MacCarthy, Cahirmone to Robert Wallace, 23 March 1767; MacCarthy to Dean Chinnery, 27 March 1767; Wallace, Dublin to MacCarthy, 28 March 1767, Midleton MSS (P.R.O.N.I. T2,862/4/7, 8, 6; 'Enquiry into the outrages committed by the Levellers' by MS in Dublin Magazine, ii (1763), 196.


297. 'Enquiry into ... the Levellers', 196. Cf. the comment of R. H. Ryland, The history, topography and antiquities of the county and city of Waterford (London, 1824), p. 321: 'a favourite notion among the common people is, that it [Slievegrine] was reserved by Queen Anne for the relief of the poor ...'. 
head tenants. After the early 1760 enclosure of 'common' land hardly ever featured again as an issue in agrarian disturbance. Yet the observation of a judge on Assize in 1793 that 'vulgar' opinion held 'that every foot of land, not enclosed was a common' was doubtless still true, for although large enclosure schemes continued, they seem to have been carried out with a measure of discretion where grazing access was being diminished.

The major exception to this was the unrest connected with the upland plateau of 25,000 acres in west Waterford known largely as Slievegrine; as early as 1621, an inquisition had discovered common use of the tract to have been 'very ancient and general', and a number of townlands belonging to the Fitzgerald/Grandison, Boyle/Burlington and other estates, enjoyed grazing rights. A legal opinion of 1733, after some enclosures had apparently been made by Burlington tenants, held 'that Lord G[randison] is the owner of the soil ... but ... he cannot bring the right of common which the adjoining lands have used, in question ... yet the inclosures ... may be thrown down, ... Lord G[randison] as owner of the soil is the only person who has a right of inclose, ... he may inclose part leaving sufficient common for the cattle

298. Cf. David Landes, Ardfert to Viscount Brandon, 10 April 1762, Crosbie MSS (T.C.D. MS 38821/248); Christopher Musgrave, Tourin to the Earl of Grandison, 6 April 1765, Villiers Stuart MSS C/15; Alarm to the Protestants, pp. 31-4; Cork Journal, 5 April, 12 April, 23 April, 24 May, 1762.

299. An unusual instance (both in place and in time) of the levelling of new ditches occurred in 1777 in a lowland district on a Newman farm (East Dromrastill, Ballyclough parish), Cork Evening Post, 24 April 1777.

300. This was the observation of the Chief Baron to the County Court jury, hearing the Slievegrine case: Hibernian Magazine, 1793, 277. For a case of circumspect planning of enclosure (of Dungarvan commons), see Pierse Barron, Fahagh to [Viscount Villiers], 17 March 1779, Villiers Stuart MSS E/6.

in the adjoining lands who have a right of common';

there seems to have been no legal consensus that such a 'right' could exist under Irish land law). Some Whiteboy levelling in 1762 may have occurred (certainly the movement was active in a neighbouring parish), but piecemeal reclamation by larger tenants probably continued. Part of the upland was let by Earl Grandison in 1787 to two local gentlemen, who commenced a major enclosure programme, only to be challenged in the summer of 1792 by an assemblage of over 300 people who had answered a chapel-notice call; they proceeded to level much of the ditching for, as one of the lessees conceded at a subsequent (largely unsuccessful) prosecution, 'the peasants of the country had been accustomed to consider the lands as a common'. But if this type of enclosure was thwarted by such actions, it could proceed in other ways.

Around the turn of the century, the colonization of the hills by small squatters became noticeable, and a number of attempts by Grandison's successors to extract rent from such 'freebooters' on part of the area were unsuccessful, both because of legal challenges to the family's title, and of the intimidation of those who were prepared to come to terms. Head tenants and neighbouring landowners gained control of some of the area over time, and 279 Slievegrine cabin-holders were added to the Dromana rent-roll in 1820;


303. Some of those executed in 1762 were involved in levelling the ditches of the Magraths and Musgraves (both families involved on Slievegrine) above Lismore: Alarm to the Protestants, pp. 31-4.


305. Lord Henry Stuart to Coutts Trotter, 3 April, 20 April, 1803; John Mansfield, Dublin to Sir William Homan, 21 Feb. 1809, Villiers Stuart MSS G/1; plaintiff's case, Stuart v. William Curreen et al.
nevertheless the greater part remained in the hands of 'strangers, beggars and outcasts from other places'. 306

Other areas of uncertain legal status which were used for common grazing (such as much of the Boggeraghgs) did not generate conflict, being more remote and unsuited for permanent settlement. But where marginal land previously used as common was near the coast, contiguous to densely settled lowland, and where there were disputes over land title or lax estate management, the Slievegrine pattern of colonization could recur; an instance of such was a tract of 'mountain' in Barryroe. 307

* * *

Behind the various developments in the region's agriculture lay one great continuity: an ample labour supply. It was perhaps the key factor permitting the local flexibility of farming and accounting for its capacity for output growth.

In districts where large tenants predominated in the early eighteenth century, their labour requirements were supplied in two ways: by subletting part of their land to undertenants who paid a proportion of rent in labour, and by maintaining an extended household of servants, living in and out, who were kept at little cost. Among smaller farmers at that time, labour requirements beyond the resources of the family were primarily met by use of the meitheal.

The existence of the regular or tied rural labourer, the household head who spent the greater part of the year in working for another, has already been discussed in a tenurial context; the growth of this class was a major, if unnoticed development in the course of the century. He worked for a daily wage, usually at a rate (or set of rates) agreed verbally


at the beginning of the agricultural year; this wage, expressed in money terms, was set against the rent of a cabin, an Irish acre or two and the right to graze one or more collops on the employer's pasture. Any surplus in a labourer's favour at the end of the year had normally been cancelled out by foodstuffs and implements previously supplied. Cash only appeared when it was advanced for goods to be purchased at the local market or fair. Under this system close to 200 days' work in the year seems to have been generally necessary to avoid cash payments to an employer. For labour was of course seasonal: the hay, corn and potato harvests were periods of intense activity, the only times when labour shortages would occur. Wages were often set at a somewhat higher rate in summer than in winter, indicating some degree of freedom for the labourer in choosing at what time he could fulfil his labour obligations. Highest wages were at those times that coincided with labourers' own planting or potato digging.

Labourers were also available on a more temporary basis. For reclamation and enclosure work, men were often hired on a piece-rate basis, at a fixed amount per perch of ditch built; major draining and building activity also attracted casual labour. Before the later part of the century


309. For a breakdown of seasonal employment, see Lota/Bohillane account-book (loc. cit.); also, labourers' accounts 1777-8, Carey MSS ('Strawhall File' U.C.C.).

310. Cf. copy, John Purcell to Lady Glerawley, 30 April 1784, Ryan Purcell MSS (Cork Archives Council); Henry Bowman, Lismore to John Heaton, 17 May, 1794, Devonshire MSS (P.R.O.N.I., T 3,158).

in most situations where wages had to be rendered in cash, they were fixed at levels below the nominal rates agreed with regular labourers. Only at harvest time when extra hands had to be recruited were higher sums given.

Data on wages of either regular or casual labour before 1800 is both fragmentary and deceptive: apart from the estimates of travellers and commentators, labour accounts only survive to document the employment practices of large tenants and landowners; this is hardly surprising as the tally-stick was the normal accounting method for the majority of farmers. Therefore the general trends suggested in Tables 5:iv and 5:v are but a rough guide to the reality. Labour accounts even where formalized, failed to distinguish between regular and temporary labourers, while contemporary regional estimates masked undoubted local variation. In assessing labourers' rents, the general absence of written contracts makes comparison over time difficult, for there were a variety of perquisites (turbary rights for instance) which might or might not be part of an agreement. This said, it is clear firstly that there was a gradual upward drift in nominal wages, hardly perceptible before the last quarter of the century, but quite apparent during the French wars; secondly, that when regarded in real terms (i.e. wages converted into the amount of land they could pay off) there was a secular decline. The changing economic status of the regular labourer was not perhaps apparent till the last quarter of the century, for up until then access into the ranks of the cattle-owning small farmer class was not too difficult to achieve where there were supplementary earnings from domestic industry or where a favourable settlement on reclaim-

312. William Cooley to Perceval, 14 Feb. 1745/6, Egmont MSS (B.L. Add. MS 47,005B, f. 19).

313. Cf. 'A citizen of Cork's letter ...' (loc. cit.).
### TABLE 5:iv

Labourers' wages (old pence) p.d.

| Number of samples at different locations', or specific local/regional estimates |
|----------------------------------|--|---|---|---|---|---|---|---|---|---|
|                                | 4\(^{1}-4\) \(^{1}\) | 4\(^{1}\) \(^{1}\) | 5\(^{1}\) | 6\(^{1}-6\) \(^{1}\) | 6\(^{1}\) \(^{1}\) | 7\(^{1}\) | 7\(^{1}\) \(^{1}\) | 8\(^{1}\) | 8\(^{1}\) \(^{1}\) | 9\(^{1}\)-10\(^{1}\) |
| Before 1700                    | 1 1; (1)                    | 1 1; (1)                     | 3 3; (2) | 1; [2] | 1; [1] | 2; (1) | 4; (1) | 1; [3]; [5] | [2] | [2] | [2] | [2] |
| 1700-25                        | 1 1; (1)                    | 1 1; (1)                     | 3 3; (2) | 1; [2] | 1; [1] | 2; (1) | 4; (1) | 1; [3]; [5] | [2] | [2] | [2] | [2] |
| 1776-95                        | 1 1; (1)                    | 3 3; (2)                     | 1; [2] | 1; [1] | [2] | 1; [1] | [2] | [2] | [2] | [2] | [2] | [2] |

These returns (drawn from Co. Cork, south Kerry and west Waterford) can be assumed to refer to regular undieted labourers, except those bracketed thus:-( ) = temporary/casual labour; ⟨ ⟩ = specifically harvest rates; ⟨ ⟩ = specifically harvest labour (i.e. migrant); [ ] = urban labourer rates, or those found in the proximity of Cork city; * = specifically including diet. N.B. No retrospective estimates of wages dating back more than five years are included.

Sources: These are set out in Append. xxi.
TABLE 5:v

Rent of labourer's cabin, acre and collop (£.00)

Number of samples at different locations, or specific local/regional estimates

<table>
<thead>
<tr>
<th>1700-25</th>
<th>75p-£1</th>
<th>£1-£1.25</th>
<th>£1.26-£1.50</th>
<th>£1.51-£2.00</th>
<th>£2.01-£2.50</th>
<th>£2.51-£3.75</th>
<th>£3.26-£4.00</th>
<th>£4.01-£5.00</th>
<th>£5.00-£6.50</th>
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<tbody>
<tr>
<td>1</td>
<td>1; (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1726-50</td>
<td>(3)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1751-75</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1775-95</td>
<td>1</td>
<td>4; (2)</td>
<td>2; (1)</td>
<td>1; (2)</td>
<td></td>
<td></td>
<td></td>
<td>[1]</td>
<td>[1]</td>
</tr>
<tr>
<td>1795-1815</td>
<td>2</td>
<td>1</td>
<td>1; (1)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>[1]</td>
<td>2</td>
</tr>
</tbody>
</table>

Returns can be assumed to refer to a cabin and acre; round bracketed returns refer to collop rent; square bracketed returns to rent for a manured acre.

Sources: See Appendix xxv.
able land had been secured. After this period, such access may not have been closed (the small corn producers in some of the new tillage areas were hardly all ex-dairymen), but it was against the dominant trend. The decline in the number of extra items rented by labourers over and above a potato garden, and the narrowing of the range of conveniences supplied was evident by the 1780s: the ownership of a cow was becoming less common, being replaced at first by sheep as a source of milk (and perhaps profit); after the turn of the century the adverse 'terms of trade' were placing even the renting of a collop beyond many labourers' earning power. The increasing reference to agreements by which an employer was to manure the potato acre is additional evidence of the disappearance of the labourer's own dung supply. Only the pig remained universal, but it was of little use in this respect.

This process, the greater inflation of labourer's rent over labourer's remuneration can be seen as a consequence of a 'scissors': on the one hand labour supply was in the long run growing faster than demand, and on the other the rise in eighteenth-century land values was in large measure a result of the secular upswing in agricultural prices. What mattered to

314. Internal evidence suggests improving circumstances in the case of individual labourers in account with Ffelix Swyny, 1742-8, Macroom account-book 1742-97, p. 13 (P.R.O.I. M 972x); labourers' accounts 1777-8, Carey MSS (loc. cit). Young's local comments on trends in labourers/'cottiers' standard of living are inconclusive: Tour, ii, pp. 13, 27, 125. At least Mockler was unambiguous - in his pessimistic view: 'Mallow in 1775', 23-4.


316. Robert Pratt to the Earl of Shannon, 22 July 1764, Shannon MSS (P.R. O.N.I. D2,707). Young found that some of 'the poor people' around Annsgrove (Castletownroche) had no cows; around Castleomartyr they had (only) 'a collop or two of sheep'; around Coolmore 'not many of them keep cows, but a few sorry sheep for milk'; around Castleisland 'very few keep cows ... 20 years ago ... they had all cows': Young Tour, ii, pp. 13, 60, 78, 125. For the dependence on sheep, cf. Townsend, Cork, p. 237.
agriculture was that the real cost of labour through the period was falling. Even the high mortality of 1740-1 had only passing impact on wages (and this is all the more striking if adults, as seems likely, suffered disproportionately). Certainly the change in the farming structure of the region away from specialization in dairying had enormous implications for labour demand. Where one family could in theory manage up to 160 acres (stat.) under dairy, three labourers (with their families) were the minimum required for a thirty-acres (stat.) farm wholly under tillage. The prominence of such a labour-intensive crop as potatoes (Kearney calculated that it employed four times as many men as corn), and the prevalence of labour-intensive ploughing practices were responsible for the particularly high labour/land ratio. Yet real wage movements imply that a faster growth of population more than compensated for the increase in demand.

However, while this seems to be true taking the region as a whole, supply and demand were not evenly matched at the local level. This is indicated in two ways: internal wage variations, and the pattern of seasonal migration. Highest wage levels were, predictably, in the liberties of Cork, but the pattern otherwise, as the distribution in Table 5:vi suggests, was for wages to be highest in the north and east, lowest in the south-west, and Townsend implied that the differential was linked to the varying rent levels.


318. 'O'Brien's survey' (1968), 98; Townsend, Agriculture of Cork, p. 43. But in contrast, Robert Gordon's Carrigduff farm of 143 acres (stat.?) — clearly a new mixed farm, primarily for dairying — was being set with only four labourers' houses: Hibernian Chronicle, 2 Nov. 1790.


## Table 5:vi

<table>
<thead>
<tr>
<th>(Catholic)diocese</th>
<th>Location</th>
<th>Number of Parish returns</th>
<th>Average daily wage (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloyne</td>
<td>Most of Co. Cork north of the Lee</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td>Cork*</td>
<td>The greater part of Co. Cork south of the Lee</td>
<td>17</td>
<td>10.7</td>
</tr>
<tr>
<td>Ross</td>
<td>Coast west of Kinsale</td>
<td>11</td>
<td>9.3</td>
</tr>
<tr>
<td>Kerry (part)+</td>
<td>South Co. Kerry, Bear, west Duhallow</td>
<td>27</td>
<td>8.2</td>
</tr>
</tbody>
</table>

* Returns for the Liberties parishes of Carrigrohan and Douglas excluded.

+ Returns for Killarney town, and parishes in north Kerry excluded.

for potato gardens, in other words was merely nominal. 321 This can only have been part of the explanation. In the coastal belt where traditions of intensive agriculture were strongest, wages were relatively lower because of the prevailing farm structure: 322 farms were small, and adequately supplied with labour from the family. Labourers were by no means absent, but the more normal method of supplementing family labour was by enlisting the household through the hiring of unmarried servants; for instance in the Carrigaline neighbourhood, of forty farms surveyed c. 1805 three quarters had one or more servants living in; it can be assumed that their duties were more agricultural than domestic. 323 The declining importance of dairying in northern and eastern districts brought with it distinctly smaller farms, but farms which were generally large by the standards of the south-west; stratification of farmer and labourer was more evident, 324 and the rewards for the regular labourer somewhat better than in other parts. Witnessing the beginnings of the transition in the 1770s, Young noticed marked increases in wages, 325 the greatest being a 30% rise in the Mitchelstown neighbourhood in the five years prior to his arrival. This district, with the Bride and Blackwater valleys to the east, remained a high wage area thereafter; the single highest agricultural wage recorded for the region was the harvest rate for Roche's Country c. 1812: twenty-eight pence per diem. 326


324. In the 1831 census (when agricultural labourers were specifically enumerated) the Mallow-Charleville-Kanturk triangle, and the corn countries of the (east) Bride and Lee valleys stand out as areas of particularly high labourer/farmer ratios: Burke 'Aspects of the population geography of Co. Cork', Map 44.


326. Wakefield, Account of Ireland, ii, p. 227. Such a wage for common labour must have been exceptional even at harvest time.
Thus it was to this area and to Imokilly that most seasonal migratory labour was directed.

The pattern of seasonal migration, its volume and its origins, can only be tentatively reconstructed, but several characteristics are plain: firstly, the main sending area was Co. Kerry, with Bear, Bantry and west Muskerry also important. Even in the 1680s, exotic itinerant habits were being attributed to Kerry people (seasonal migration to Spain was claimed, but this was rebutted by a contemporary who suggested that the only significant migration was the summer booley to the mountains); over a century later O'Brien observed how so many Kerrymen 'roam about in hordes through the neighbouring counties in spring and harvest to help their cultivation ... whence in these seasons ... a Kerryman and an hireling are synonymous terms ...'. Secondly, intra-regional migration of this kind only became important after other patterns had already appeared: the harvest migration to England, the bi-annual fishing migration to Newfoundland from Waterford, the autumnal migration to Cork city for the slaughtering season were all of some importance before the last quarter of the century. Kerry was not specifically associated with these movements, but when internal agricultural migration developed with the expansion of cultivation in the 1770s and 1780s, the direction of the migrant traffic was clearer. A Rightboy rule of 1786 that 'no labouring man is to go to another parish to


328. O'Sullivan, 'Molyneux's geographical collections', 37, 46.

329. 'O'Brien's survey' (1968), 99.

330. For earlier evidence of harvest migration from the region to England, see 'Considerations on the bill to restrain the burning of land' [c. Aug. 1744], Egmont MSS (B.L. Add. MS 47,004B, f.96); Edmund Burke to Garrett Nagle, 21 Oct. 1767 in T. W. Copeland ed. The correspondence of Edmund Burke, i (Cambridge, 1958), p. 329; Mockler's 'Mallow in 1775', 24. For evidence of local participation in the Waterford-based Newfoundland migration, cf. Christopher Musgrave, Tourin to Earl Grandison, 6 April, 8 April 1766, Villiers Stuart MSS C/15; Young, Tour, ii, p.184; Mockler's 'Mallow in 1775', 24. There is little explicit evidence on the development of the seasonal migration into Cork city, but cf. Young, Tour, ii, p. 66.
save the harvest' was designed to discriminate against the men from the west; this 'regulation of famine' was claimed to be endangering, for instance, the potato harvest in Great Island, where farmers were being forced to discharge their labour force drawn from 'the west' and Kerry. Indeed it seems that potato digging was the earliest developed and most important activity in harvest migration; this was the occasion for 'an annual influx of the western peasantry' into Imokilly, and at Castlemartyr a hiring fair for potato diggers grew up.

The migrant has tended to be confused with another more shadowy segment of the rural population: the labourer who did not have regular employment, who rented his cabin and potato garden from one or more persons who sought cash rather than labour in return. Thus Young used the term 'spalpeen' (spailpín, normally meaning a seasonal migrant), to describe the base of the social pyramid in the Mitchelstown area: 'there are here every gradation of the lower classes, from the spalpeen, many among them strangers, who build themselves a wretched cabin in the road, and have neither land, cattle nor turf, rising to the regular cottar ...', and other contemporaries linked

331. Mr O'Leary's defence: containing a vindication of his conduct and writings (Cork, 1787), p.141; Cork Evening Post, 2 Nov. 1786.

332. Townsend, Cork, pp. 550, 616; Wakefield, Account of Ireland, i, p. 395; S. O Suilleabháin, 'Some folklore traditions of Imokilly', in J.C.H.A.S. 1 (1945), 73. It is possible that the Castlemartyr hiring fair may have only developed in the nineteenth century, but given the scale of this movement some such organization for recruiting temporary labour presumably emerged at an early stage. For evidence of the hiring of Kerrymen in north Cork, Lombard account-book, 1793-7, Timothy Sullivan's account (N.L.I. MS 5,910).

333. Young, Tour, ii, p. 275.
itinerant beggars with seasonal labourers.\textsuperscript{334} And while such assumptions serve to underline that migration was induced more by 'push' than 'pull' factors, they obscure the existence of a permanent and growing component even of richer communities. As early as 1774 Mockler believed that only one half of all labourers in the region were 'constantly employed', the other half 'have not work above one half of the year'.\textsuperscript{335} It was the existence of such a pool of underemployed 'out-labourers' that does much to explain the trends in real wages. It may have contracted somewhat with the growth of labour demand, but in most districts the slack was never completely taken up. There was an irony in the fact that by the early nineteenth century the out-labourer's (necessarily cash) wage, like the migrant's wage was actually higher than that given to the regular labourer; this was presumably because the latter's lower wage was a trade-off for the guarantee of employment sufficient to pay for his cabin and acre.

\[
\ast \quad \ast \quad \ast
\]

It will already be apparent that the importance of new farming methods derived from England and elsewhere was relatively small, for all the public attention they attracted in the late eighteenth century; in fact the influence of English practices was far more persuasive in the very different tenurial and agricultural environment of the seventeenth and early eighteenth centuries. However because of the heightened participation of many landowners in estate management in the later period, their own farming activities deserve brief notice, just as the public institutions designed to promote agricultural

\begin{itemize}
  \item \textsuperscript{334} E.g. 'A merchant's letter' in Hibernian Chronicle, 9 Aug. 1781, which gave as explanation for the increase of beggars in the countryside during the summer of 1781, the curtailment of migration to England that season because of the fear of press-gangs. N.B. the ambiguity between beggar and migrant labourer in the Irish designation spailpín (and spailpín fáinach).
  \item \textsuperscript{335} Mockler's 'Mallow in 1775', 24.
  \item \textsuperscript{336} Townsend, Cork, pp. 251, 414, 551. For the continued absence of cash in dealings with regular labourers see Wakefield, Account of Ireland i, p. 515.
\end{itemize}
enlightenment which flourished on their support, should not be totally ignored.

Desmesne farming in the early eighteenth century was, as we have seen, of little importance beyond servicing the needs of landowners' households. In the third quarter of the century, rising landed incomes and the enhanced esteem for the gentleman agriculturalist transformed quite a few desmesne parks into active farms. Young on his tour visited nine seats in Co. Cork on which the average desmesne size was some 870 acres (stat.); of this, the average under corn was 137 acres and much of the rest was kept for grazing rather than for ornament.337 (This was of course not a representative sample, rather an indication of the scale of the larger operations). The enthusiasm for practical agriculture of such a key person in local society as the second earl of Shannon no doubt assisted its social acceptability; his most unusual initiative was the importation of Medoc oxen, accompanied by a French ploughman, in the early 1770s; the French mode of ploughing (by the horns of the oxen) was soon being copied by other gentlemen.338 But the real significance of Shannon's type of farming was that it was an advance on older attitudes towards the desmesne which had seen it as the stage for elaborate displays of conspicuous consumption. Shannon showed a positive delight in experimental farming, and demonstrated the viability of large-scale agriculture; for instance in 1790 he calculated that the manure supply from eighty cattle housed in new building would 'in a very few years' pay off the entire cost of the requisite byres.339 The construction of elaborate farm buildings was becoming an important part of a landlord's seat, involving considerable expenditure: when a gentleman's residence on Little Island was

338. Papers relating to Simon Andrant etc. 1772. Shannon MSS (P.R.O.N.I. D2,707); Young, Tour, ii, p. 22,55-7.
was being advertised for letting in 1786, it was claimed that £1,600 had recently been laid out in out-offices and farm buildings. At Coolmore (near Carrigaline) Young found a 900-acres desmesne; although thirty-six years later it had contracted by a third, three farm-yards were being used in its management; there were ten different crops being grown on it, and there was also an impressive cattle inventory.

Desmesne farms became the setting for many of the imported farming practices – such as floating meadows, turnip cultivation and the use of machinery for such processes as winnowing and thrashing – which were not (at this period) copied beyond the desmesne wall; (nevertheless Francis Barry, probably Cork's first agricultural implements manufacturer, sold forty thrashing machines, some water-powered, in the eight years after 1805). Much of this innovation was inspired by the increasingly available agricultural literature, most of it English and reprinted in Ireland by the Dublin Society. New practices were dictated by a desire to imitate the self-evidently successful English methods, not by any belief in their general local applicability. No institution patronizing improved agriculture emerged in the region until the establishment of a Cork farming society about 1789. Its early activity was in promoting a six-course Norfolk rotation adjusted to Irish conditions (by substituting potatoes for turnips), and it offered cups and medals to be conferred at Assizes time. Later this was changed to more


342. Water meadows were not wholly unknown on 'working' farms: remarks and observations on the manor of Lismore by B. Scale, 1773, Lower Bridane, Lismore MSS (N.L.I. MS 6,201); Kearney, Essays on agriculture, p. 49.

343. M.F.M., iii (1813-4), 34-5.

344. E.g. the library at Doneraile Court had major holdings of such publications, acquired it would seem at the time of publication (Catalogue of the auction of the library of Doneraile Court, 17 and 18 Dec. 1969 by Hamilton & Hamilton, Dublin).

345. Resolutions of the Society for the Encouragement of Agriculture; Planting, Manufacturers and Useful Arts, 10 Sept. 1789. [Cork, 1789].
specific awards, medals for gentlemen, implements for farmers, money for 'cottagers', for special endeavours under such headings as the increased use of dung, the culture of green crops, the farm in best condition, the neatest cottage. But the practical impact of the society was predictably limited: after twenty years, one verdict was that it had 'excited a spirit of useful competition among the higher [orders], and rendered rural economy a favourite and fashionable pursuit', hardly touching the bona fide farmer. In 1810 it was merged with the Cork Institution, a body formed shortly before with broader educational interests than agriculture, but it had a primary commitment to improving farming standards; it was a much better organized undertaking, and received a government grant until about 1820. It oversaw the establishment and partial funding of baronial farming societies in co. Cork (there were six by 1813, and some of these boasted many working farmers among their members); it also undertook the publication of the Munster Farmers' Magazine which ran for more than a decade. The latter's circulation was quite high (1,200 was the original print-off), and there was a reduction in subscription for landlords who undertook to distribute it among their tenants; such gestures might seem rather optimistic, but the level of illiteracy (at least among younger farmers in the more advanced districts) should not be exaggerated; in any case, the advocates of such agricultural publications argued that sound suggestions would soon reach even illiterate farmers at second hand.

347. Townsend, Cork, p. 16; cf. ibid. p. 730.
348. (T. D. Hincks), An account of the progress of the Cork Institution ... (Dublin, 1810), pp. 6-7; Townsend, Cork, p. 697; M.F.M., iii (1813-4), 167-8, 258; vii (1820-1), 61, 63.
349. M.F.M., ii (1812-3), 269.
The three objectives of the Cork Institution's agriculture committee were to encourage improved ploughing methods, potato culture by the drill method, and the use of green crops. All of these aims as we have seen were to some extent achieved, even before 1815, with ploughing the most obvious area of change. Apart from the diffusion of better horses, the techniques of ploughing seem to have improved rapidly as a result of the immediate popularity of the ploughing match. This new social phenomenon seems to have flourished wherever local farming societies thrived; for instance in 1813 ploughing matches at Carrigaline were deemed almost as popular as horse racing; similarly at Fermoy, the victory of a 'working' farmer at a ploughing match was celebrated (hardly spontaneously) by a vast procession through Fermoy town (500 on horseback, led by two pipers); also in 1813, at Dripsey an 'agricultural festival' was organized by the local paper manufacturer, where a crowd of 12,000 were reported to have come to observe the performance of 147 ploughs (and enjoy the patron's forty to fifty tierces of porter provided for all). Such events can be presumed to have had some 'demonstration effects'.

* * *

The strengths and weaknesses of the region's farming development are not difficult to summarize. On the credit side lay what was veritably an output revolution, stretching back to the early seventeenth century and made possible by abundant land, abundant labour and a rapidly developed supply responsiveness. This latter factor, the sensitivity of farming to price trends was of course initially a function of the competitive land (i.e. lease)

352. M.F.M., ii (1812-3), 87.
353. Ibid., iii (1813-4), 255.
354. Irish Farmers' Journal, 15 May 1813; for a more colourful account, ibid, 12 June 1813.
market, so that agrarian commercialization - the rise of 'commodity farming' - was achieved at a considerable social cost, most obviously in the erosion of the gneever tenant in the first two-thirds of the century, and in the fate of the labourer later on. But the pressure of rent and tenurial mobility as factors explaining responsiveness to market signals were clearly of diminishing importance. The great revival of cereal production was brought about in the first place by a simple reaction to the opportunity for profit. The degree of responsiveness can only be qualitatively adjudged, for the year-to-year price and supply fluctuations in major commodities, so heavily determined by external factors, can only be approximate gauges. The complaints of producers are more unequivocal evidence: 'no sooner is there a demand for any sort of commodity, but in a year or two the market is over-stocked, and what this year bears a great price shall be worth little or nothing the next, so I don't know but the surest and shortest scheme a farmer could lay down to make a fortune, would be to go directly contrary to everybody'.

A constant criticism of rural society before the late eighteenth century was the pervasive idleness of the working population, often specifically attributed to those of native stock; when this is translated into the less emotionally-charged terms of relative leisure preference, it can be seen to be not without some foundation. Yet towards the end of the period there was a change; the paternalistic Townsend's judgement of 1810 contrasts strikingly with earlier conventional wisdom: 'There are not, perhaps, in any district to be found a greater number of hard-working people than this county produces.' Among the farming classes at least, the trend towards occupational (if not tenurial) security must partly explain the

355. William Taylor, Ballynort to Viscount Perceval, 3 March 1730/1, Egmont MSS (B.L. Add. MS 46,996*, p. 37 [N.L.I. Mic. p 4,678]).

shift in economic attitudes.

Supply responsiveness and 'industriousness' may have helped to produce and sustain a dynamic agrarian economy, yet in many ways it was an inefficient and unstable creation. The development of more economical forms of land management, whether labour-saving or land-saving, was decidedly limited. The factor supply situation explains this to a large extent. Nonetheless it does seem that some forms of intensification of production were discouraged by attitudes towards land where it was regarded in part as a consumption good; the desire of working farmers, in one landowner's view, was 'to take all the land they can possibly get without considering their sufficiency to stock and improve them'; farmers, another local observer half a century later felt, were always more interested in adding to their farms than in making them more productive. 357

There was no necessary conflict between such an attitude and the practice of sub-division. Control of acres could be a measure of status even where partible inheritance was the custom, and indeed the desire to extend a farm was a logical reaction to compensate for falling individual farm size. In the early nineteenth century the weaknesses in the rural economy were to arise far more tangibly from the consequences of subdivision than from land-hording, yet towards the apex of the social pyramid of working farmers, inheritance practices having more affinity to those of owners of property, i.e. limited primogeniture, would seem to have operated. This clearly applied to a minority of the farming class in 1800, but it was from this group that the inheritance customs of post-Famine Ireland were to be borrowed - with adaptations.

The most obvious weakness in the region's agriculture was more in the
d nature of a risk: the narrowing of the range of foodstuffs that went to make
up the subsistence of labourer and farmer. It was a process not directly
related to changes in income distribution; the complexity of factors has been
emphasized, which together produced the dichotomy of early nineteenth-century
century rural society: grain production for the market, a subsistence
preference for the potato. Few in the eighteenth century recognized the
dangers.

358. But some did: Mockler's 'Mallow in 1775', 27.
the central features of world history's ending, apparent from the
foregoing analysis of rural society, and thus, the profound influence of
foreign trade on agricultural production will amount to the commercial
magnificence of Cork city. These inferences are essential, for they indicate
influence determining trends in Ireland where we see changes in the volume
and composition of external trade.

The growing importance of foreign trade was shown, and of course in
the early seventeenth century. But as the conclusions of chapter 1 suggest,
the commercialization of production was partly and remotely integrated
above Cork city was undoubtedly expansion, as soon as from the 1660s, but
there remained an element of competition between Cork, Dublin and
Waterford as markets for the agricultural goods of the region. But the
balance between the ports was changing at an accelerating pace. In 1659
the tonnage of shipping involved in trade to centres offshore was already
about three times that recorded at Youghal and Kinvara combined; in 1711
Cork tonnage was more than eleven times that of its former competitors
(see appendix, table 10). The trends in total market activity at these
centres were not dissimilar; neither Kinvara nor Youghal as

VI

THE MARKET

<table>
<thead>
<tr>
<th>Year</th>
<th>Cork</th>
<th>Kinvara</th>
<th>Waterford</th>
<th>Wexford</th>
</tr>
</thead>
<tbody>
<tr>
<td>1660</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>1670</td>
<td>550</td>
<td>450</td>
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<td>1700</td>
<td>700</td>
<td>600</td>
<td>500</td>
<td>400</td>
</tr>
</tbody>
</table>


*Note: All data are approximate and some of the

Villeggiatura's notes were critical to the study

The trends in total market activity at these
centres were not dissimilar; neither Kinvara nor Youghal as
Two central features of south Munster's economy, apparent from the foregoing analysis of rural society, are first, the profound influence of foreign trade on agricultural production and second, the commercial hegemony of Cork city. These features are related, for the strongest influences determining trends in inland trade were changes in the scale and composition of external trade.

The growing importance of foreign trade stretched back of course to the early seventeenth century. But as the findings of chapter I suggest, the commercialization of production was patchy and economic integration slow: Cork city was undoubtedly expanding, at least from the 1650s, but there remained an element of competition between Cork, Youghal and Kinsale as outlets for the agricultural goods of the region. But the balance between the ports was changing at an accelerating pace: in 1699 the tonnage of shipping invoiced at Cork by customs officials was already about three times that recorded at Youghal and Kinsale combined; in 1774 Cork tonnage was more than eleven times that of its former competitors (see Append. table ix). The trends in total market activity at these centres were not dissimilar: neither Kinsale nor Youghal as

1. Gateage tolls in the three ports were canted annually and some of the letting rates across the century are extant, those below being a sample. They are however not strictly comparable, firstly because of differences in the manner of collection and the level of charges, and secondly because freemen in each corporation (many of whom were not townsmen) were exempted; how far toll canting was openly competitive remains doubtful:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cork</th>
<th>Kinsale</th>
<th>Youghal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1706-7</td>
<td>£600</td>
<td>£53</td>
<td>£</td>
</tr>
<tr>
<td>1725-6</td>
<td>556</td>
<td>57</td>
<td>14.25</td>
</tr>
<tr>
<td>1749-50</td>
<td>54</td>
<td></td>
<td>23.12</td>
</tr>
<tr>
<td>1763-4</td>
<td>1450</td>
<td>115.75</td>
<td>37.25</td>
</tr>
<tr>
<td>1775-6</td>
<td>123</td>
<td></td>
<td>102.50</td>
</tr>
</tbody>
</table>

(Sources: Caulfield, Cork, pp.322, 784; Caulfield, Kinsale, pp.209, 226, 254, 273, 286; Caulfield, Youghal, pp.429, 451, 473, 492; O'Sullivan, Economic history of Cork, p.310).
urban centres grew noticeably during this period\(^2\) whereas Cork's population growth was dramatic, particularly in the early eighteenth century.\(^3\) By the 1760s Cork had probably ten times as many citizens as Kinsale, eight times as many as Youghal.

TABLE 6:i

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1660</td>
<td>6,000</td>
</tr>
<tr>
<td>1706</td>
<td>17,595</td>
</tr>
<tr>
<td>1719</td>
<td>26,945</td>
</tr>
<tr>
<td>1725</td>
<td>35,232</td>
</tr>
<tr>
<td>1744</td>
<td>37,570</td>
</tr>
<tr>
<td>1752</td>
<td>41,175</td>
</tr>
<tr>
<td>1760</td>
<td>55,640</td>
</tr>
<tr>
<td>1787</td>
<td>51,840</td>
</tr>
<tr>
<td>1796</td>
<td>57,033</td>
</tr>
<tr>
<td>1821</td>
<td>71,500</td>
</tr>
</tbody>
</table>

Sources: See Append. table xxii

Thus in contrast to their seventeenth-century dynamism these latter towns became commercial backwaters, minor dependencies of Cork. The development puzzled contemporaries. Some attributed their failure to sand bars in their estuaries; in the case of Kinsale, quay development prior to the 1680s had indeed altered the harbour for the worse, but hardly enough to affect normal commercial shipping.\(^4\) There is less evidence of such a problem at Youghal; indeed an inhabitant believed in 1729 that it was rather 'the long and universal misrepresentation of our harbour (which in reality is extraordinary

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2. The number of families recorded in Youghal parish in 1716 was 629, in 1766, 735; J. Edwards, Notes on Youghal MS, Hodnett MSS (Cork Archives Council); Transcript of Cloyne religious returns, 1766 (P.R.O.I. M5036).

3. Its size however was consistently exaggerated in the later eighteenth century because no distinction was drawn between the urban area and the very large municipal liberties.

safe and commodious ...", that was in part the cause of the town's decay. A less fanciful explanation was that their short approaches left them exposed in wartime, in contrast to the landlocked estuary of Cork. Yet the impressive military fortifications downstream of Kinsale, mainly a legacy of the 1670s, were unrivalled until the improvement of naval defences in Cork harbour in the last quarter of the eighteenth century. Aside from these inadequate explanations and some general assumptions about the monopolizing spirit of Cork traders, there is extant no contemporary analysis of why the fortunes of the region's ports were so contrasting. There are in fact two separate issues: why it was Cork that achieved supremacy, and why foreign trade between the 1680s and 1710s so rapidly concentrated on one centre.

The comparative advantages of Cork are more readily explicable than the timing of the centripetal tendency itself. Early eighteenth-century export growth in the region was based on the staples of beef and butter, and initially the most important sources of supply were Imokilly, the Lee and Bandon valleys, and above all the north Cork lowlands; thus in the mid-1720s nearly 70% of Cork city's gateage tolls were being collected at the toll bars on Mallow and Blarney lanes (or at points between them).

Cork did not have navigable access into its immediate hinterland - an asset which both Kinsale and Youghal enjoyed - but the hinterland that mattered was across the watershed and north of the Blackwater and, given


6. Memorandum book of Thomas Pembrock, 1717-53 - in second ser. of pagination - p. 35. This of course is only a measure of land traffic, but dues collected by water baliffs (on goods coasted) were perhaps only a tenth of those taken on land traffic (cf. O'Sullivan, Economic history of Cork, p. 310).
the nature or the staples, the absence of water transport did not materially affect the cost of bringing them to market. In addition to this relative proximity to the areas of pastoral surplus, Cork was centrally placed in relation to the whole of south Munster, whereas Youghal could only expand by challenging Waterford; Cork had also greater room for physical expansion than either Kinsale or Youghal, and reclamation for quay extension presented no problem; furthermore the city had greater anchorage capacity in its harbour. And even in the seventeenth century when the development of its export trade was sluggish, it was the undisputed centre for import distribution in the region, the consequence of a stronger urban tradition than in its potential rivals.

These factors do not explain the timing and rapidity of trade centralization at the end of the seventeenth century, achieved in spite of the considerable physical damage sustained by Cork city during and after its siege in 1690 by Williamite forces. Indeed the conditions created by two long-drawn-out international wars over the next generation probably did most to undermine the position of the smaller ports. In Kinsale's case this was ironic, for since Wentworth's time it had emerged as the main naval victualling centre in Ireland, in part through the influence of the first case of Orrery and the major local landowners, the Southwells. Official stores had been maintained there; in the 1670s contracts were controlled by several prominent merchants, notably George Crofts in the 1680s, Edward Hoare in the 1690s. Both of these were primarily Cork-based, but Hoare was patronized by Sir Robert Southwell on

7. See above pp. 31, 49-51.
the understanding that he should reside at Kinsale; this he apparently did for
some years, building large brewing and slaughtering facilities there. 9

But the decline of business on peace led Hoare to withdraw to Cork c. 1698,
although the management of victualling seems to have remained in the family's
hands until at least 1713; it was however orchestrated from Cork. 10 The
construction of limited repair facilities together with the victualling
demand itself, certainly boosted Kinsale's trade and attracted farmers to
its markets who subsequently went to Cork. 11 But much of the provisions
were drawn from Cork and beyond, so that commercially Kinsale presented no
threat in this to Cork. 12 The decline of victualling in 1698 led the South-
well agent with several Kinsale merchants to raise a £2,000 joint stock to
sustain peacetime victualling, 'for no one single person is able to have a
stock of goods by them to furnish shipping as they come in, so that all the
ships that come in here, must go or send to Cork ... which brings a discredit
on this place'. The same group was later planning more active participation
in the provisions trade. 13 Judging by the export data their success was
short-lived. Kinsale's only basis for stable commerce would have been the
establishment of a peacetime victualling office and a dockyard as permanent

9. Copy, Edward Hoare, Kinsale to Commissioners for Victualling, 30 June
1691; Hoare, Cork to Southwell, 1 July 1691, Kinsale manorial papers
vi; Hoare to Southwell, 13 March 1693/4, 8 April 1694, 2 Nov. 1695,
Kinsale manorial papers vii.

10. James Waller, (Kinsale) to Southwell, 1 April 1697, Southwell MSS
(B.L. Add. MS 38,149 {N.L.I. Mic. p1,046}); Berkeley Taylor, Kinsale
to Sir John Perceval, 23 Jan. 1712/3, Egmont MSS (B.L. Add. MS 46,979*
{N.L.I. Mic. p4,674}).

11. Remarks on the advantages to Kinsale received by the ... Victualling
Office ..., 20 Sept. 1726, Southwell MSS (B.L. Add. MS 9,714, p. 175
{N.L.I. Mic. p24}); R. D. Merriman, ed. Queen Anne's Navy (Navy

12. James Waller, Kinsale to Southwell, 19 Sept. 1694, Southwell MSS (B.L.
Add. MS 38,147 {N.L.I. Mic. p1,045}).

13. Waller, Kinsale to Edward Southwell, 4 Feb. 1697/8, 11 Oct. 1698,
Southwell MSS (B.L. Add. MS 38,150, pp. 96-7, 107 {N.L.I. Mic. p1,046}).
facilities; this was not done because of, among other reasons, the limitations of the harbour: the bar prevented anything larger than fourth-rate ships of the line from entering it.  

The significance of victualling lay not only in the local demand it created, but in the fact that where naval vessels congregated, so too would merchantmen in a period when the high incidence of enemy privateering made the protection provided by convoy highly desirable. Throughout the nineties but particularly in 1695-6, and again after 1702, the depredations of French privateers were severe, a situation which discouraged isolated overseas ventures.

It is understandable that Edward Hoare with his continuing Cork city interests sought to draw naval victualling over to Cork. The provision of convoy protection could materially change business sentiment: the prospect of Dutch naval protection in 1696 for ships taking Cork woollen cloth to Holland was sufficient to animate the local wool trade.

The link between the wars and Youghal's decline was more straightforward. Its foreign trade in the 1680s had been largely orientated towards France and Flanders. For most of the 1690s war effectively stopped this, and alternative markets were not developed; instead as one merchant


16. Copy, John Buchanan, Cork to the Lords Justices, 10 June 1694; copy, Samuel Snelling, Kinsale to the Lords Justices, 12 June 1694 (P.R.O. ADM/1/3988); J. Dawson, Dublin to the Lords of the Admiralty, 10 Dec. 1708 (P.R.O. ADM/1/3989); James Waller, Kinsale to Edward Southwell, 21 June 1695, Southwell MSS (B.L. Add. MSS 38, 148 N.L.I. Mic. p1, 046); Edward Hoare to Sir Robert Southwell, 23 June 1695, Kinsale manorial papers vi; A. Edwards, Cork Remembrancer (Cork, 1792), p. 121; 'Letter book of Joseph Ffranklyn', 51-3.

in the town noted in 1696, 'Most of the goods in this place are bought up and sent for Cork'.

A modest recovery in trade at the turn of the century was short-lived; the tonnage of shipping invoiced in 1699 was not to be reached again until the late 1760s (see Append. table ix). Youghal's continuing decay as a port and a market town became notorious; although stagnation was particularly associated with years of war — in the 1700s and the 1740s — it was still regarded as a 'languishing town in peacetime'.

War thus precipitated the concentration of trade on Cork, yet it cannot be regarded as the ultimate cause of this process. Rather changes in the location of external markets and in the composition of exports were responsible. The declining relative importance of England and of Continental markets north of Nantes in the region's trade, and its increasingly Atlantic complexion, lessened the opportunities for the smaller ports to compete with Cork.

As the volume of exports from the region rapidly expanded, led by butter and beef, an increasing proportion of trade was done on commission, on English, Dutch or, less likely, on French account, a process which favoured centralization. And as the quality of beef and of butter came to be varied according to the needs and demands of different types of consumer, the large port where specialization could develop among merchants and dealers had overwhelming external advantages. Internally it became a more attractive market to the country, with a more flexible pattern of demand. Thus as long as cattle 'whose bones carry flesh, hides, tallow etc. to market

18. Lawton to Hoar, 14 Aug. 1696 (loc. cit.).

19. For wartime comments see John Waite, London to Digby Foulke, 30 April 1709, Shannon MSS (N.I. MS 13,254/3); copy, [John Usher], Lismore to Sir William Abdy, 5 March 1743/4, 10 Dec. 1744, Lismore MSS (N.I. MS 7,180). For comments in peacetime see Maurice Ronayne to Earl Grandison, 6 Apr. 1729, Villiers Stuart MSS C/6; copy, [John Usher], Lismore to Sir William Abdy, 10 Feb. 1738/9, Lismore MSS (N.I. MS 7,179); Abdy, London to William Conner, 28 March 1748, 13 Jan. 1749 [750?], Shannon MSS (N.I. 13,252/2).
with little expense$^{20}$ and dairy products remained the major export staples the concentration of trading activity on Cork city remained. The importance of transport costs as a factor is amply demonstrated by what happened when the extra-regional demand for grain and grain-based products grew in the last third of the century: the centripetal pattern was very considerably modified.

* * *

A distinctive feature of the seventeenth century transformation of the region was, as we have seen, the foundation of a number of new urban settlements and the consolidation of others as part of the process of plantation development. However during the period when overseas trade concentrated on Cork city, neither new urban foundations nor landed development of existing urban sites was at all prominent. In retrospect the seventeenth century stands out as the major period of modern urban foundation, so that of the thirty-seven towns in the region with more than 800 inhabitants in 1821, $^{21}$ at least seventeen (46%) were effectively established between the 1580s and the 1690s; a further fourteen may have been medieval in origin, and were certainly in existence before 1700. Thus between them at minimum 84% of what constituted the market towns of the region predated 1700 and the period of greatest commercial advance (see Maps 3 - 5). Of those that appeared at a later date in this league the only two of importance, Fermoy and Cove, were not developed before the last quarter of the eighteenth century. And a majority of all the new urban creations of the eighteenth century (Map 5) postdated 1750. $^{22}$


$^{21}$ Census of Ireland, 1821: accounts and papers H.C. 1824 xii.

$^{22}$ At least two estate villages of the early eighteenth century, Annagh and Hollyhill, had disappeared by 1821.
URBAN DEVELOPMENT by LANDOWNERS in the 18th century

- Milltown
- Killarney
- Kenmare
- Dunmanway
- Castletownsend
- Annagh
- Kanturk
- Ballyclough
- Cecilstown
- Blarney
- Crosshaven
- Inishannon
- Hollyhill
- Mitchelstown
- Fermoy
- Lismore
- Rathcormack
- Villiersstown
- Curraglass
- Killeagh
- Cove
- Middleton

- New 18th Century foundations
- Landed development of existing sites

MILES
0 20
The morphology of towns once established is harder to trace, but broadly it would seem that major urban growth between the beginning of the eighteenth century and the 1750s was modest except in those cases where there was vigorous landlord encouragement or where local industry (usually textile manufacture) was expanding; frequently the two conditions were present together. Thus towns as dissimilar as Rathcormack, Middleton, Bandon and Bantry appear to have grown little in the period, in contrast to those experiencing extensive encouragement from their landlords such as Killarney and Dunmanway.

23. Rathcormack was said to have contained above 100 houses before 1690 (see above, p.25), 137 families in 1766 (Transcript of Cloyne religious returns, 1766). Middleton similarly was said to have had sixty houses before 1690 (see above p.25), 102 families in 1766 (Cloyne religious returns, 1766). For Bantry, compare Cox's comment of 1687 ('daily improving ... capable of being made a very considerable town'; 'Regnum Corcaigense', p.37) with that of Vallancey in 1778 ('a poor insignificant village': third report of Charles Vallancey, 1778, Pelham MSS). Evidence of Bandon's very modest growth can be inferred from the Church of Ireland register for Ballymodan (which took in the southern and more exclusively Protestant half of the town): in 1695-1714 there was an average of 10.5 marriages p.a., in 1745-64 10.65 p.a; over this seventy-year period, the average number of christenings was 58.1, running at 47.6 in the decades 1695-1714, 60.3 in 1745-64.

24. The impact of the spending of the fourth viscount Kenmare is hard to measure, but for qualitative comment see O Maidin, 'Pococke's tour in 1758' in J.C.H.A.S. lxiv (1959), 50. Cox claimed that his development of Dunmanway had led to a house growth from fifty in 1735 to 117 in 1749 (Cox, Letter ... to Thomas Prior, p. 37).
If the stagnation noticeable in secondary ports for much of the eighteenth century was paralleled, albeit less clearly, in the fortunes of inland towns, was this also related to the region's pastoral staples and the mode in which they were marketed? There was a clear distinction between the organisation of the two major elements, the butter and fatstock trades. In the early stages of the growth of butter exports, merchants engaged in overseas trade had obtained much of their supplies by contracting with larger dairy owners to take the herd's annual butter output at a fixed price, but by 1700 with the growing volume of the export trade from Cork city, such a personalized system was inadequate and impractical; moreover external demand and therefore prices were subject to considerable fluctuations. As a consequence, intermediaries appeared to whom export merchants could direct their bulk orders, and to whom the country dairy-owners could entrust their produce as they brought it to the city, to sell it as and when prices were favourable. These butter factors were also buyers in their own right, and although this was probably a development from their original role as factors, it had become their more normal manner of dealing by the second quarter of the century. However they had no monopoly of handling


butter en route for export, since general merchants still dealt directly with country producers, and also employed local dealers or innkeepers as agents to buy on commission at country towns, a practice that survived at least until the 1760s.  

The emergence of a pricing system agreed to and accepted by both butter buyers and export merchants was an indication of the formal role butter buyers were coming to play. A standard price was fixed in the city towards the beginning of each summer, once the scale of foreign commissions became apparent; it might be adjusted by mutual agreement, but was observed between the main butter buyers and the export merchants (if not by all butter buyers themselves). By the 1730s it was 'the custom of the city' applying at least to all corporation freeman, not 'to exceed the prefixed price' or 'price current' (later known as the cant price). By this period the butter buyers were becoming more than mere factors and buyers; two related services which distinguished them more clearly from export merchants began to be offered. Some butter merchants came to distribute to the smaller country producers at the beginning of each butter season the firkins in which the butter had to be salted and brought to market; to a lesser extent larger casks suitable for tropical markets were similarly given out (on the understanding that better salted butter would be brought back in them) and small adjustments in the scale of prices current were made for such butter. These practices may have reflected a desire to improve the quality of butter reaching market, but perhaps were only a


28. 'Discourse between two countrymen'.

result of the relative concentration of the coopering trade in Cork city; most staves were imported.

Associated with this was the butter buyers' practice of making seasonal cash or credit advances to producers, in return for a guaranteed supply. Such arrangements are recorded in the Belfast region in the 1670s, but it seems unlikely to have emerged in Cork before the 1710s or 1720s, as it could hardly have been operated without the price-pegging system introduced then (which gave some forward indication of prices over the season). By 1744 it was sufficiently important for its suspension in April of that year (with the outbreak of hostilities with France) to upset rent payments on at least the Egmont estate in north Cork. Interest on such loans was repaid by a standard adjustment of the going market rate paid the producer until butter of value equal to the advance had been brought to market; (it was the market rate less interest that was later designated the 'current' price).

Before the second half of the eighteenth century and the gradual dissolution of the old dairy system, seasonal advances can only have reached a minority of producers. More immediately important were developments in

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30. See above, p.54.


32. Purcell, Kanturk to Egmont, c.10 April 1744, Egmont MSS (B.L. Add. MS 47,009², p.65 {N.L.I. Mic. p4,679}). A similar suspension of advances in 1793 (on that occasion because of a wider crisis) was seen as a threat to Midleton's tenants if rent payments were enforced: William Welland to the Rev. Charles Brodrick, 26 June 1793, Midleton MSS (N.L.I. MS 8,871).
the actual market itself. Cork corporation, under a statutory obligation like other ports from 1721 to erect a public weigh-house employed officials whose function was to weigh all butter (and tallow) offered for sale in the city, and brand casks accordingly. A highly publicized dispute in the following year over the control of the 'weighmasters' was in essence political, but the storm around the issue suggests the importance attached to the weigh-house scheme from its inception. The amending legislation that followed the dispute introduced a further task for weighmasters (or their deputies); the quality of the product was to be tested to check that it was 'merchantable'. In such controls lay the origins of the Cork butter market and its distinctive features of quality control. However the (two) weigh-houses of the 1720s were not intended to be physical markets. At this time butter was only brought to the weigh-house after sales had been negotiated or confirmed between dairyman and butter buyer, although as the main weighing cranes were sited in part of the north suburbs - Mallow Lane - already associated with butter dealing before the legislation, they were seen even in the 'thirties as the focus of the trade: 'To establish a pair of machines in


34. It centred on the attempt by government to remove from the Corporation the right to appoint and dismiss the weigh-masters, ostensibly because of complaints against the Corporation that they had 'made use of the power vested in them to the prejudice of the country'; the government's aim was to appoint the two sitting Cork M.P.s, Hoare and Knapp, as weigh-masters; they were among the largest export merchants of the city and allegedly with the best reputations abroad. The dispute was in fact more a political quarrel between the Brodricks and their allies on the Corporation, and William Conolly and his Cork supporters: William Conolly, Dublin to [-], 12 Dec. 1723; Duke of Grafton, Dublin to [Lord Cartaret] with memorandum, 14 Dec. 1723 (P.R.O. S.P./63/382, ff. 58, 64-6).


36. Memorandum to [Lord Cartaret], 14 Dec. 1723 (loc.cit.).
the margin of a city, to gather and retain a side of a country into a daily market, upon a single spot, is a custom ... unknown to any place but this'. Only with further legislation in 1747 (specifically related to Cork) did it become obligatory for vendors to bring all their butter on entering the city directly to the weigh-houses, to be 'tried, weighed and branded' before sale. The negotiation of butter sales by the country hereafter was almost exclusively around the weighing yards, and the Mallow Lane one was to be the site of the Cork butter market throughout its history. The old practice of country producers and dairyowners storing butter in Cork and playing the market, even on occasions speculating in the butter held by others, seems to have disappeared after this measure. It was seen to be against the rural interest in another way as well: it meant that 'no countryman can lodge butter in the city ... without the knowledge of all the merchants, and as long as they know that there is any quantity in town, they will not advance the price'.

The origin of butter buyers as a vital part in the marketing system was often retrospectively presumed to have lain in the need for a group of intermediaries to handle the various types of butter brought to the city, each suitable for a different overseas market.

37. 'Alexander the coppersmith', Remarks upon the religion, trade, government, police, customs, manners and maladies of the city of Cork, (Cork, 1737; 2nd ed. 1974), pp. 78-9 (pagination from 2nd ed.).
However a range of qualities only existed from the time when there was a sharp distinction between the tropical American markets where heavily salted butter was required, and the Dutch and British where lightly salted butter was preferred. Until the British market became important after 1770, there was no great need to classify the consistency and salt level of firkin butter coming to town, for the important distinction before then lay between butter that was exported in the condition it reached Cork, going mainly to Europe and usually in quarter-bound firkins, and butter to which pickle was added, often after repacking in full-bound firkins or casks, which was destined for tropical markets; this was normally done under the supervision of export merchants and was known as rose or 'harp and crown' butter - after the symbols branded on the barrel. There was of course an element of quality control exercised by weighmasters along the lines set out in the 1723 act. The contents of every firkin were subject to inspection; samples were taken through boreholes, and rejected butter became corporation property. From the 1720s this seems to have been enforced although there is some suggestion that a more ready market existed in Cork for low-grade butter than elsewhere in Ireland.

This sophisticated, regulated market structure reinforced the power of the city to draw dairy-owners and dairymen to itself at the expense of country markets or smaller ports in the region. Of course,

41. E.g. invoice with letter, Richard Bradshaw, Cork to Jean Pelet, Bordeaux, 20 Nov. 1743; also Calwell, Lawton and Carleton, Cork to Pelet, 30 July 1737, Pelet, MSS (Archives Departmentales de la Gironde, 7.B. 1779 [N.L.I. Mic. p4,013]); copy, [Richard Hare], Cork to John and David Brown, 12 May 1772, Hare letterbook.

42. Crofts to Egmont, 21 Dec. 1747 (loc. cit.).
it did not quite have a monopoly: Youghal's butter exports were about 10.6% the level of Cork's over the first third of the century, dropping to 2.6% and 2.7% in the second and last thirds. Demand from Youghal was quite erratic over the years, and its dairy hinterland can only have been very small; exporting merchants purchased supplies straight from farmers, in one case providing tubs, salt and other dairy utensils in return. In the western part of the region the pattern was more complex: none of Youghal's potential catchment area was outside a thirty-five mile radius of Cork city, whereas most of west Co. Cork and all of Kerry lay beyond it. Until at least the mid-century road developments direct producer contact with Cork was unlikely, yet recorded shipments from the ports of Kinsale, Baltimore and Dingle were a mere 1.7% of Cork exports in the first third of the century. Part of the explanation for their poor showing was the delayed development of commercial dairying in the area, which only intensified in the second half of the century; also, some of the local butter was bought up by Cork merchants and probably shipped direct – as was the case at Bantry, to which a group of Cork merchants came primarily to arrange the purchase and lading of pilchards late in each summer in the 1730s – or by local shippers predominantly engaged in smuggling high-duty goods from France, such as the O'Connells of Iveragh in mid-century.

43. Receipt of Earl Grandison's butter by Thomas MacNamara, 1744, Villiers Stuart MSS F/6; Garret Mernyne, Youghal to Thomas Dillon and co., 16 July 1727, Dillon MSS (N.L.I. Mic. p2, 762).

44. Patrick and Andrew Galway, Bantry to Thomas Dillon and co., 21 Sept. 1737, Dillon MSS.

45. Denis McCrohan, Nantes to Maurice Connell, 23 April 1754, O'Connell MSS (U.C.D. School of Archives A/2/15); copy, McCrohan to Connell, 29 Nov. 1755, O'Connell MSS (N.L.I. Ms 13,645/10). For reference to (presumably) licit butter shipping from west Cork, see transcript of memoirs of T.S. Reeves, Somerville MSS.
Maritime ventures in butter on local account, even of a legal nature, fell away after the 1770s. For as large dairies, run on the letting system, remained the dominant mode of production as dairying became consolidated in these remoter districts, the relatively large quantities of butter that individual dairy owners had to market over the season made journeys to Cork worthwhile. Between the first and second thirds of the century legal exports from the western ports had grown absolutely and relatively from 1.7% to 4.8% of the volume leaving Cork city; yet the proportion fell slightly in the last third of the century (to 4.6%) precisely when butter production was growing in inland western districts. By this stage, Cork was receiving a very substantial proportion of its butter supply piecemeal from the west. Some of it was shipped on small coasters and hookers, but the preponderance came by land; even at Nedeen (Kenmare), Young found in 1776 that the butter produced there 'was all carried to Cork on horses' backs'. \(^46\) Much of it passed through Millstreet and along the 'Kerry pike' across the Boggeraghgs. \(^47\) Until carts were introduced, it took one man and a horse about a week to deliver two firkins (a hundredweight) to market and return home, an investment of time that outsiders queried: 'The people, ignorant, suspicious and perfectly idle, prefer this labour to letting their property out of their sight, though by sea carriage four-fifths of the expense is saved'. \(^48\)

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47. Beaufort, Travels in 1788, i, p.87; Townsend, Cork, pp. 666-7.

buyers were arranged with producers in these areas when the buyers came out to country towns in the spring. 49

How far did Cork’s unassailable control of butter marketing weaken the power of producers to determine prices and conditions of sale? Organizational developments in the trade were often treated with suspicion by producers. The fixed price system was attacked thus by one ‘countryman’ in 1734: ‘not one buyer will exceed the other, so we are obliged to let them have our goods at their own prices having no other market to go to, thus are we managed and governed by them ... ’50

Similarly the 1747 legislation to channel all incoming butter through the weighing yards was seen as discriminating against the country. It is impossible to determine how far there really was a degree of urban exploitation; it undoubtedly existed, but there were certain countervailing forces: the outcome of the 1723 dispute demonstrated the capacity of parliament to regulate trading practices in spite of the opposition of a majority of merchants, and parliament was of course more responsive to the landed interest, whose income was based on favourable modes of dealing by the city with their tenantry, than to the special pleading of townsmen. And it is mistaken, at least for this period, to assume that in the relationship between producer and merchant, the countryman had no bargaining power. In the marketing of butter, internal competition between buyers for supplies did exist, and this helped to preserve open market conditions. Furthermore, export merchants saw themselves as guardians of the butter trade,

49. Hall, Tour, pp. 266-7.

50. ‘Discourse between two countrymen’ (loc. cit.).
and were always anxious to curb the butter buyers' 'excesses'. And even among themselves, there seems to have been an abnormal degree of personal rivalry, a result of the commission trade where personal reputation was all important. 51

The reorganisation of the Cork butter market and the creation of the controlling 'Committee of Merchants' illustrate these internal divisions. In March 1769 a group of twenty-three export merchants formed a voluntary association which thenceforward sought among other things to be the 'public' body regulating the butter trade, specifically to assist the weighmasters and augment them in their function of monitoring the quality of incoming butter by employing inspectors (at exporting merchants' expense) to grade the product on the basis of its consistency, its salt content and its freshness; the committee also determined to introduce a formal three-tier price system, based on three qualities of butter. 52 Their initiative was ostensibly because of 'the visible decay of our butter trade, added to the severe losses which attended the adventurers in it'. 53 Yet exports in the previous years had been at a high level, and there is no evidence of any major price fall. It was also claimed that the 'honest

51. Alexander the coppersmith, Remarks ..., pp. 72-7.

52. For a general account of the growth of the Cork butter market, with particular reference to the early nineteenth century, see O'Sullivan, Economic history of Cork, pp. 256-76. For what is probably the earliest description of it as organized by the Committee of Merchants, see Cork Evening Post, 3 April 1769.

maker of butter' had never received more than 'the current price for all sorts', whereas the butter buyer charged a premium on sales of 'prime' sorts to the export merchant. In fact the catalyst was external: after the suspension of the Cattle Acts in 1759, butter could be exported to England. With the rising volume of general trade in that direction and with the threat of greater competition in traditional Continental and colonial markets, an English market for butter was an attractive prospect, but one which Cork was not immediately able to take full advantage of because of the high salt level in local butter. In 1768/9 Cork handling over 35% of total Irish butter exports but only 18.5% of those going to Britain. By giving in effect a premium on lightly salted butter, the 'Committee of Merchants' scheme was intended to gain better prices and a greater English trade. The project was agreed to by the weighmasters and seems to have been welcomed by the country, as indeed dairy-owners had nothing to lose. However there was active opposition from those merchants primarily in the Atlantic trade and from some butter buyers. Richard Hare, the largest commission merchant in the city was an opponent of the committee; two years after its formation he acknowledged that butter at market was noticeably 'better' and fresher as a consequence of the scheme, but that it had hurt the West Indies trade. Thus he pointed out to one complaining

54. Ibid.

55. Copy of Richard Hare, Cork to William Kirkpatrick, 4 Oct. 1771, Hare letterbook, p. 103; C.E.P., 27 Nov. 1769.

56. Hibernian Chronicle, 7 May 1770.

client that 'what I shipped for you was exceeding good but for want of
salt must have turned out bad in a warm climate'. 58 The scheme was indeed
successful in that record butter prices were reached 59 and exports to
England rose sharply. By 1774/5 Cork handled over 34% of Irish butter ex-
ports to Britain which was to remain about its share of a growing market
for the rest of the century. By 1777/8 Britain took up over half of Cork's
exports and over the last quarter of the century the average was 51%.

Butter exports to the 'East Country' (primarily Germany) fell away earliest;
Dutch and French markets were later abandoned. The American and Portuguese
trades survived, and the second quality, saltier butter was the standard
for tropical markets. Price flexibility developed between the different
qualities according to relative demand, and it was not unknown for 'firsts'
and 'seconds' to sell at the same price.

The complete control of the Committee by an annually rotating panel
of exporters was a source of tension between this group and the butter
buyers. The latter set up their own committee in 1784, and they exploited
the weak legal standing of the original Committees inspectors viz-a-viz
the weighmasters in a drawn-out dispute during the mid-1780s. 60 The
butter buyers, making an allowance with the weighmasters, also opposed a
scheme for the inspection of empty casks prior to their distribution (by
butter buyers) to the country; in 1785 the weighmasters had the inspectors
expelled out of the weigh-yards into the street, while a year later the

58. [Hare] to Kirkpatrick, 4 Oct. 1771. Cf. [Hare] to Robert Barnevelt,
London, 28 March 1772, Hare letterbook, pp. 281-2.

59. [Hare] to Barnevelt, 28 March 1772.

60. Minutes of the Committee of Merchants, 5 April 1784, Cork Museum;
Hibernian Chronicle, 3 May 1784; C.E.P. 11 May, 25 May 1786.
butter buyers managed to get a county Grand Jury resolution in their favour against cask inspection (although this was probably no more than a partisan gesture by the weighmasters' county political allies). The resolution of these disputes on the basis of various compromises (most significant was the allocation of a substantial minority of the seats on the Committee to butter buyers) actually strengthened the Committee's influence; the potential conflict of interests between butter buyers and exporters, between those dealing primarily with the English market and those with tropical ones, forced the Committee to develop a system of checks and balances in the manner of appointments, appeals and market regulation by which it achieved almost unintentionally, a degree of impartiality and administrative effectiveness that was rare indeed by the public standards of the eighteenth century. In spite of an increasing reliance on the small independent dairymen for supplies, butter quality was progressively improved; that it was done at a period of sharply rising butter prices makes it the more remarkable. One of the Committee's innovations that made this easier was a change instituted in the mode by which firkins were to be brought to market. Traditionally they had been 'capped' by the farmer so that testing involved boring the wood. By accepting the onus of paying for their capping in the city, the merchants relieved farmers of one task and facilitated the job of inspectors as firkins arrived with only a cabbage-leaf cover.

The service required of butter buyers by the country was enlarged with the more sophisticated process of marketing, and its complexities demanded the aid of a factor to protect particularly the small vendor: 'the

61. Minutes of the Committee of Merchants, 31 May 1785; 17 April, 20 April 1786.


63. Cf. statements at the meeting of country gentry and Cork merchants re the butter trade, C.E.P., 1 May 1786.

64. Ní Chinnéide, 'New view of Cork city', 10; Report from the select committee on the butter trade of Ireland, H.C. 1826 (406) v, 332-4.
country people in general think that unless a person in a good coat assists them, they will never be done justice ...'. 65 Smaller dealers, mere factors, 'canters', grew up, and they came to be seen by the early nineteenth century as a distinct group from the more traditional butter buyer. 66

If any group suffered by the hegemony of the Cork butter market, it was those with a stake in the country towns. The merchants in one or two did attempt to provide some of the services of Cork butter buyers, such as the giving out of firkins, 67 yet it was only with the decline in the demand for seasonal advances in the early nineteenth century, 68 the extension of Anglo-Irish trade and shipping facilities in the wake of the specific expansion of the corn trade, and the enactment of legislation facilitating the establishment of new country butter markets in 1822, that towns such as Youghal and Tralee began to challenge Cork's monopoly. 69

* * *

The beef trade offers many contrasts in organization to the marketing of butter, but some parallels in its end results. There was decidedly greater value added between the departure of fatstock from their finishing pastures and the quayside lading of barrelled beef than between the milk pail and the final despatch of butter firkins from the city. And because there was a range of secondary products from slaughtered cattle - hides,

65. S.C. on butter, 231.
67. E.g. Robert Baldwin and co. of Bandon: C.E.P., 2 April 1767.
68. S.C. on butter, 228-9.
tallow, horns, offal – the processing was organizationally more complex. The tasks of slaughtering, cutting up, salting and barrelling beef required greater skills and supervision, and these operations were more subject to economies of scale than the churning and salting of butter (until that is, the era of the mechanical separator).

Even in the 1680s, in the first generation of the provisions trade, Cork stood out as a centre of salted beef exports at a time when Youghal led in butter exports. Cork indeed had over 40% of the total national beef exports then. Neither Youghal nor Kinsale were without their butchers or their slaughter yards in the late seventeenth century, but their activities were more quickly and more totally eclipsed by Cork than were those of the butter dealers in the smaller ports. Taking the years set out in Append. Table xi the combined beef exports of the smaller ports in the first third of the eighteenth century amounted to a mere 5% of Cork city's exports (a much smaller proportion therefore than in the case of butter), divided almost equally between Youghal and the western ports, while over the rest of the century their combined exports hovered at around 1% of Cork's.

One consideration that must qualify any comparison between the butter and beef trades is the differing size of the supply hinterland; butter supplies normally came only from within what has been defined as the Cork region in this study, whereas fatstock was acquired directly from north Kerry, Limerick, Tipperary and on occasions even further afield. As the previous chapter has shown, the growth of regional specialization in agriculture led to a relative decline in cattle fattening in the Cork region itself in the first half of the century, while other districts, notably Tipperary,

70. See Table I:vii, p. 48 above.
gradually shifted from wool to beef at approximately the same time. This said, the beef trade still deserves major attention for several reasons: in its early stages - from the 1670s - bullock production was a distinctly Cork county activity and when it was later eclipsed, it remained an important secondary element of agriculture on the richer low-lands of the region; secondly, an important eighteenth-century component of the beef export trade was in low-quality meat from old oxen, small cattle and dry cows, fattened or otherwise, which were largely drawn from within the region; thirdly, the rapid physical growth of Cork city and the organization of the provisions industry can only be understood by examining the complementary staples, butter and beef. Their growth patterns were timed differently, but their long-term rates of expansion over the first seven decades of the century were remarkably similar (see Append. tables x and xi).

A poorly developed road system ruled out any possibility of inland competition with Cork in meat processing: firkins of butter might be readily carried on horseback, but the much heavier standard beef barrel would have required a cart. Several alternative modes of marketing fat-stock evolved which were to co-exist throughout the century, although with changes in rank order of importance. The earliest mode of sale was probably that directly by grazier to merchant at the three-day St. Mathew's fair beside the city, but the development of cattle selling in connection with the twice weekly markets must have come in the early stages of a commercial beef trade. The massive growth of beef exports at the end of the Spanish Succession war must have strained older forms of dealing; the plot in the north suburbs used specifically for a cattle market had to be enlarged in 1711,\textsuperscript{71} and about this time

\footnotesize\begin{quote}
\end{quote}
a daily cattle market during the slaughtering season began to be held.\textsuperscript{72}
At the end of the 'thirties, a quite new 'market for the standing of cattle' was acquired by the Corporation, which covered 2\(\frac{1}{4}\) acres.\textsuperscript{73} A patent for two extra two-day fairs at the Lough (on the south-west side of the city) in 1747\textsuperscript{74} was an indication of new sources of supply of cattle to the city. But such a late fair creation is misleading; city fairs were taking on more the nature of rowdy carnivals for the urban poor, although they may have had some role in supplying milch cattle to liberties dairy farmers. The cattle markets however remained of importance, particularly in the sale of low-quality cattle. But there were two other modes which certainly received greater contemporary comment, both perpetuating what was clearly an early development, the direct contact between grazier and butcher: one involved the grazier in effect hiring the services of the butcher before or after arranging the sale of carcase, hide and tallow; the other, the butcher coming out into the country and contracting with the grazier for his stock.

The key individual here was the butcher. In the early years of salted beef exports, London principals had actually sent over butchers to slaughter and prepare beef for them,\textsuperscript{75} but local butchers by the 1680s were responding to the new export demands; they may have been purchasing cattle from graziers on their own account even then.\textsuperscript{76}

\begin{flushleft}
\textsuperscript{72} Edward Lloyd, \textit{A description of the flourishing city of Cork} (Cork, 1732), p. 8.
\textsuperscript{73} Caulfield, \textit{Cork}, pp. 580, 584.
\textsuperscript{74} Caulfield, \textit{Kinsale}, p. 352.
\textsuperscript{75} Cal. S.P. Dom. 1685, no. 56.
\textsuperscript{76} This is implied in copy, [William Hovell], Cork to John Houblon, 22 Dec. 1685, Hovell letterbook.
\end{flushleft}
From that time most of the buyers actually present and dealing at the city cattle markets were butchers acting as agents for export houses or speculating themselves. Salesmasters on the lines of Dublin market never developed, and jobbers as distinct from butchers who dealt in the city markets, are not recorded before the late eighteenth century. However, the capital involved in slaughtering facilities was fairly modest, so that the economic status of the butcher was low, at least before the 1720s, and the religious affiliation generally Catholic. Because of the larger unit value of the commodity, fatstock, and the greater substance of most vendors, there was less need for the kind of protection butter buyers gave countrymen at the butter market.

The employment of the butcher by the grazier purely in his technical capacity was to remain a constant feature, for direct merchant/ grazier dealing, particularly between leading commission merchants and very large graziers, survived throughout the period. The practice in this case was for the merchant to contract and buy at an agreed deadweight price. A butcher would then be engaged to kill and flay the number of bullocks involved in the deal—either by the grazier or the merchant, usually it seems the former. When the grazier sought to play the market, the butcher was hired before any sales were negotiated. And if commissions were slack, beef might be stored, even from autumn till the following summer, at the grazier's expense, for 'when the cattle is once fat ... they must be disposed of to make room for the young

77. The late birth and feeble development of the city's corporation of butchers (in contrast to that of coopers, for instance) is suggestive; Caulfield, Cork, pp. 253, 540.

stock which they [the graziers] bring from mountain farms ...'. 79 But even in years of good prices, bullocks were sometimes slaughtered on country account and 'the beef, hide and tallow sold to best advantage'. 80 The opening of a 'complete large slaughter house' in 1750 by Edmund Welsh, 'victualler', was the occasion for him to advertise that he would 'kill cattle for country gentlemen on very reasonable returns'. 81

The mode of dealing involving butchers that attracted most outside notice was the one which they increasingly employed from about the 1720s: this was where, on receiving advances from merchants, specifically from those houses that were also in banking, they went out to the fattening districts during summertime and contracted with individual graziers to buy their animals (or the beef content) and slaughter them in the following autumn; it would seem that where only the beef was contracted for, they undertook to sell the hides and tallow on commission. Advances from bankers to ordinary export merchants was certainly a regular feature by the 'twenties; the specific practice of giving seasonal credit to butchers and thus allowing them to short-circuit the market by dealing outside the city was well enough developed for it to be used as ammunition in a pamphlet attack on bankers in 1737. 83


80. Berkeley Taylor, Ballymacow to Sir John Perceval, 7 Dec. 1714, Egmont MSS (B.L. Add. MS 46,980*, p. 2 [N.L.I. Mic. 4,675]).


82. Augustus Carré, Cork to Jean Pelet, Bordeaux, 7 Feb. 1728/9, Pelet MSS (Archives Départementales de la Gironde 7.B 1779 [N.L.I. Mic. p4,013]).

Only the scale of this latter activity, not its basic features changed in later decades. Purchases made at fairs - in Tipperary, Limerick and Clare - probably formed a proportion of Cork butchers' dealings, but this was always inconsiderable, as graziers disliked holding back sales till autumn. Generally it seems deals were done 'in a field without [the butcher] alighting from his horse to handle' the cattle; by September butchers were back in the city and drew gradually over the next three months on their purchases from the country. The reliance of butchers on the advances of export merchants/bankers did not mean that they were mere agents. Their role in determining price levels, however much these might directly reflect expectations of external demand in the following winter, was an independent one, and by their own speculations they could gain or lose between the time they made engagements in the country and the slaughtering season, if there were major changes in anticipated or actual external demand. It was therefore possible (if not common) for those in the butchering trade to prosper and graduate to the ranks of exporters. The Moylan family illustrate this process: John Moylan, father of the future Catholic bishop of Cork, had been a Fair Lane butcher, paying a head-rent of £51.50 p.a. on leasehold property which included six houses, slaughter yards as well as fields on Fair Hill at his death in 1756 - apparently about the time his sons set up as exporters; they were to become one of the leading Catholic houses in the city's trade.

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84. 'New view of Cork city', II; Dutton, Clare, pp. 96-7.
85. Ibid. p. 102.
86. Young, Tour, ii, p. 258.
87. One butcher claimed in August 1738 that on account of the rumours of war he would lose 'near £1,000 by the bargains ... made this year': William Taylor, Egmont to the Earl of Egmont, 24 Aug. 1738, Egmont MSS (B.L. Add. MS 47,003*, p.180 [N.L.I. Mic. p4,678]).
In the processing of beef there was none of the problems for the export merchant of monitoring quality that existed in the butter trade. For it seems that every process after actual slaughter - the division of the carcase, salting, packing and pickling were controlled by the exporter, for these were all carried out in his cellars by his employees, under his own or his clerks' eyes. A commission merchant's standing overseas depended so largely on the quality and consistency of the barrels and casks branded with his name that supervision of the more crucial processes was delegated as little as possible. Coopers were present in the cellars to complete the sealing of the barrels; they of course also supplied the barrels and casks for packing. This branch of coopering was probably much more important than that of supplying firkins and casks for the butter trade; individual master coopers were often associated closely with particular export houses dealing in beef - a relationship not paralleled in the butter trade. During the labour disputes involving journeymen coopers which the Committee of Merchants attempted to end in the 1770s, and which again surfaced in the 1790s, the master coopers were treated almost contemptuously by the export merchant body - there were about sixty masters in the 1770s, each having on average about a dozen journeymen. The supply bottlenecks that occurred during particularly hectic slaughtering and processing seasons invited what was a skilled labour force to use their bargaining strength to improve their wage position. As early as 1732 journeymen were reported to be combining to share some of their masters' profits, and long before the 1770s successive combinations had made them the craft aristocracy of the town. Their effect-

89. See copy, [Hare] to Peter Holme, Liverpool, 19 Oct. 1771, Hare letter-book, p. 152.
90. Dublin Gazette, 28 Aug. 1732.
91. Copy, [Hare], Cork to James Gammel and co., 23 May 1772, Hare letter-book, p. 341; Caulfield, Cork, p. 786.
iness arose from the difficulty any export merchant had who sought to put out work to country coopers, and efforts to bring the latter into the city at times of dispute do not appear to have been successful.  

The most important secondary products from the beef trade were tallow and hides. Tallow throughout the period was a separate export staple (in its unrefined form), although unlike other pastoral products its main market was England, to a lesser extent the Low Countries and France. For most of the century candle manufacture and soap boiling were confined to production for the home market (including a coastal trade in candles to Ulster), and tallow merchants generally restricted themselves to melting down the coarse animal fats into a substance that could be barrelled. Some melters were primarily butchers, but most of the trade was in the hands of independent processors who bought from them or direct from graziers. By the 1770s the largest tallow dealers were contracting for tallow in the country, presumably through butcher-factors. For the greater part of the century the proportion of tallow to beef exports remained fairly constant at about two-fifths the volume of the latter. In the 1770s there was a mere 10% value added in the processing of tallow melters relying on rapid turnover and cash sales to export merchants.

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92. See advertisements placed by Master coopers in C.E.P., 3 April 1758, and by the Committee of Merchants in Hibernian Chronicle, 4 May 1772; also minutes of the Committee of Merchants, 16 April 1799.

93. E.g. obituary note on Noblet Johnston, dealer in beef and tallow (Cork Journal, 22 Dec. 1755), and advertisement of premises in Blarney Lane of Stephen Grant, butcher (Hibernian Chronicle, 30 Oct. 1755).

94. See copy, [Hare] to Messrs Meyler and Maxe, Bristol, 12 Oct. 1771, Hare letterbook, p. 142.

95. Ibid; also copy, [Hare] to Messrs Fry, Tripp and co., 22 April 1772, Hare letterbook pp. 307-8; copies, Thomas Hewitt, Cork to John Walker, Newry 23 Oct. 1790, to Messrs Ross Thompson and sons, 29 Nov. 1792, letterbook, 1789-1802, Cork Distillers MSS (Cork Archives Council).
or advances from them. However because of overlapping external markets for tallow and butter some melters took export orders from England, both for their own product and for butter.\footnote{Hewitt letterbook, passim.}

Both the huge melting trade and the much smaller 'finishing' operations in chandling and soap boiling for the home market were largely contained within the city until the last quarter of the century; the decision of a Mallow town grocer to diversify into soap and candle manufacture in 1767 was against earlier trends.\footnote{C.E.P., 3 Dec. 1767.} However by the 1780s candle and soap manufacturers were becoming more dispersed over the region; in 1787 there were some thirty-six in the city as against forty-three in the rest of the region (in 1785),\footnote{Account of miscellaneous licences, 25 June 1785, J.H.C.I. XI, dcccxi; (n.b. returns for the Cork excise district were not returned); 'The Cork Directory for the year 1787 by Richard Lucas' in J.C.H.A.S. lxxii (1967), 135-157 [hereafter Lucas' Directory].} although the scale of production of the latter would have been considerably smaller. In the hides trade a contrast also existed between the dominant activity of preparing hides in an unfinished 'green' state, and that of tanning and curing for the home market; however in this case the latter processes were never so markedly concentrated in the city. Admittedly in the 1680s there had been an active trade in tanned as well as untanned hides to France, but from the turn of the century the export of untanned hides (mainly to Holland) was to grow far more strikingly than that in tanned hides (mainly to Iberia). The trade in untanned hides followed the growth of beef exports, while that in tanned ones stagnated till the 1730s and fell away almost completely thereafter (see Append. table xii). From the 1750s Britain gradually emerged as the main importer of green hides from Cork, taking a prominent position from the 1770s; indeed by the 1790s local tanners were actually complaining
of the import of English finished leather.\textsuperscript{99} The declining position of
tanned hides in exports can be explained in two ways: the increasing local
cost of oak bark, which was a real disincentive as domestic supplies from
native woodland because exhausted before mid-century, and the high cost of
British bark made sales in the Iberian market unattractive, compared to
those of raw hides to Dutch and English tanners. But a second factor was
the substantial and growing home demand for low-quality leather — for
brogues, shoes, harness and tackling — which sustained a tanning industry in the
region that produced leather of a standard unacceptable to foreign buyers.

Throughout the period there had been tanyards in most market towns,
drawing on male calves and cattle dying from natural causes for much of
their raw material, but also presumably from city butchers. In Cork itself
the tanning industry remained relatively unimportant: in the 1780s
there were seventy tanyards licensed in the region outside Cork city, and
only seven manufacturers recorded in it (three of whom were engaged in other
activities as well) although this may exaggerate the contrast, as doubtless
the Cork tanneries had much larger capacity on average.\textsuperscript{100} An indication
of the size of the home market, at least after 1770, is revealed by the
proportion of hides weighed at the Cork market - set up by the Committee
of Merchants — which do not appear in subsequent export returns, i.e. those
retained for domestic use; this was running at about a third of the total
over the last three decades of the century.\textsuperscript{101}

\textsuperscript{99} O'Sullivan, Economic history of Cork, p. 245.

\textsuperscript{100} Account of miscellaneous licences, 25 June 1785; Lucas' Directory.

\textsuperscript{101} This estimate is based on a comparison of the skin and hide market
returns for those years in which exports are presented in Append.
table xii; however the year for the former ended in May, for
the latter in March: Ledger C, skins and hides inspected, Cork
Committee of Merchants MSS (Cork Museum); P.R.O. Customs/15.
Skin dealers working for the export trade, who bought their hides from the butchers, had been more important in the city than tanners: these intermediaries were responsible for cleaning and preparing the hides (e.g. liming the hides to remove hair), shaping and salting them for sale to export merchants. But the latter also maintained correspondence with country skin dealers, especially when calf skins were sought.

The processing trades embraced other minor activities into which butchers, chandlers, skinners and tanners might diversify. The growth of the whole industry was determined for the greater part of the century by trends in the central staple, beef. But beef exports (as set out in Append. table xi) after several phases of rapid growth, peaked in the early 1770s to fall away fairly sharply over the last quarter of the century. Some have suggested that this decline was at least in part only nominal, that if account is taken of the official contracts placed by the British Treasury, the Admiralty and the London head contractors during the American and French wars with Cork merchants, the fall in exports would turn out to be less decisive. However if hides passing through Cork market are taken as a proxy of slaughtering activity (and

102. For a list of the 'chief skin buyers' of the city, see C.E.P., 26 Feb 1790.

103. Exporters on occasions made advances to them as to so many others.

104. E.g. copy, [Hare] to John Connell [Charleville], to Sept. 1771; to Edmund Connell, [Newcastle west], to Sept. 1771, Hare letterbook, p. 90.

105. Of the three gluers listed in Lucas' Directory, one was also a skinner, another a tanner.

all hides were supposed to be weighed) official exports probably only understated the real level of slaughtering between 1778/9 and 1780/1, and then by little more than a fifth. But official statistics probably did ignore a substantial part of officially contracted provisions, for substantial anomalies exist between English and Irish customs data on the volume of beef (and pork) exported to England from the time of the American war. It seems probable that Cork was responsible for some of these hidden exports, and that the quantity was similar to that coasted to Cork from other Irish ports and cannot be part of the city's slaughter; because of the concentration of official contracting on Cork, an extensive 're-export' trade is known to have developed in handling the already barreled wet provisions of other Irish centres.

**TABLE 6:ii**

<p>| Ratio of hides weighed at Cork hide market to Cork beef exports (three-year averages) |</p>
<table>
<thead>
<tr>
<th>No. of hides weighed as % of barrels of beef exported</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1770/1 -1772/3</td>
<td>94.64</td>
</tr>
<tr>
<td>1773/4 -1775/6</td>
<td>99.51</td>
</tr>
<tr>
<td>1776/7 -1778/9</td>
<td>106.63</td>
</tr>
<tr>
<td>1779/80-1781/2</td>
<td>120.32</td>
</tr>
<tr>
<td>1782/3 -1784/5</td>
<td>95.41</td>
</tr>
<tr>
<td>1785/6 -1787/8</td>
<td>100.2</td>
</tr>
<tr>
<td>1788/9 -1790/1</td>
<td>91.27</td>
</tr>
<tr>
<td>1791/2 -1793/4</td>
<td>102.94</td>
</tr>
<tr>
<td>1794/5 -1796/7</td>
<td>101.45</td>
</tr>
<tr>
<td>1797/8 -1799/1800</td>
<td>99.65</td>
</tr>
</tbody>
</table>

Sources: Ledger C, Skins and hides inspected, Cork Committee of Merchants MSS, Cork Museum; P.R.O. Customs/15.


As there may have been a modest growth in the average weight of stock being slaughtered in this period, it seems clear that whatever the total beef passing out of the city's slaughter horses, the decline of the beef trade in the last decades of the century was very real indeed: exports in the 1790s were down by two-thirds on the levels attained in the late 1760s. The meat processing trade did not however contract proportionately, for just as both demand and supply considerations curtailed local fatstock production, so they combined to expand pig production. Recorded pork exports (Append. table xiii) show a long-drawn-out growth from a very low base at the beginning of the century, noticeably accelerating in periods of war. This was a reflection of the changing pattern of official demand; good quality salted beef had always been the main item before mid-century, but by the time of the American war, the quantity of pork contracted for was almost certainly greater than that for beef: in 1776-8 there was an annual average of 13,575 barrels of beef and 31,018 barrels of pork shipped under Treasury contract for the British army in America from Cork; under the general 1782/3 Treasury contract, Cork merchants supplied 6,500 barrels of beef, 29,100 barrels of pork. And in the first decade of the nineteenth century the general Irish victualling office bought 1.4 times as much pork as it did beef in the country as a whole. Part of the explanation for the increased relative importance of pork in official contracts was presumably the narrowing in the price differential between

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pork and beef; pork was always somewhat dearer but the margin was fractional by the end of the century, suggestive of changes on the supply side.

The scale of government pork purchases and the sharp annual fluctuations obscure the pattern of Cork's pork exports; it is difficult to go beyond the approximation that between the 1760s and the 1790s locally-produced pork exports nearly doubled, during which time non-official demand from England rose from insignificance to become the market for about three-quarters of the total exported.\footnote{112} The marketing of pigs was more straightforward than that for other major livestock products in the region. Being predominantly raised by small holders they were sold at local weekly markets or late autumn fairs where city butchers or dealers employed buyers to make purchases.\footnote{113} Youghal played little part in this trade and pork exports from the region were almost exclusively out of Cork. By the end of the century, probably most pigs being slaughtered had been fattened on potatoes, although sour milk remained a major dietary constituent. The season for slaughter was at the turn of the year,\footnote{114} coming after the months when potatoes were most abundant in the country. Lard was an acceptable substitute for tallow to the soap-boiler, if perhaps not to the chandler.\footnote{115}

\footnote{112}{Cf. O'Sullivan, \textit{Economic history of Cork}, p. 236.}

\footnote{113}{For reference to the Macroom pig market, see Mason, \textit{Parochial survey of Ireland}, i, p. 571; for Timoleague pig market, see Townsend, \textit{Cork}, p. 258. For pig sales at fairs, see advertisement by William Sheehan, Cork butcher in \textit{Cork Journal}, 7 Jan. 1762; Townsend, \textit{Cork}, p. 469.}

\footnote{114}{Ni Chinneide, 'New view of Cork city', 11.}

\footnote{115}{Copy, Thomas Hewitt, Cork to Harford, Partridge and co. Bristol, 6 Nov. 1795; to Nathaniel Cairns, Dublin, 8 Nov. 1795, Hewitt letter-book.}
Pork apart, the provisions trade was therefore contracting markedly by the turn of the century. And although the loss of the West Indies market to mainland America was complained of, beef prices during the French wars reached new heights. But the cluster of factors discussed in the previous chapter—rising grain and butter prices combined with population growth—tempted many fatstock producers to turn to subletting rather than maintain their herds. Nevertheless the shift in the composition of exports was not quite as complete as the long-run trends in beef, tallow and hides might suggest. Two contrasting developments should be noted: a relative shift in exports towards finished or more highly processed goods, and the emergence of a livestock trade in stores to England. Bacon, candles, soap and shoe exports were growing in the 1780s and 1790s, and were consolidated after 1800. Bacon exports to England developed aside the pork trade at the turn of the century: taking two flitches of bacon as equivalent in volume to one barrel of pork, about a sixth of all pig-meat exports between 1801 and 1813 were in the form of bacon, most of it admittedly salted rather than cured. More striking

116. Irish mess beef reached almost £3.20 per cwt. in London in 1814: O'Donovan, Economic history of livestock, p. 153. For comment on American competition, see petition of the Committee of Merchants to William Pitt, 15 Feb. 1805 in minutes of the Committee of Merchants. For beef prices at Cork up to 1795, see Appendix: Table vi.

117. 7,123 flitches were exported on average against 38,383 barrels of pork in these years; there were also about 230 cwt. of ham going out. For tabulation of Cork exports in the period 1801 to 1825, extracted from the N.L.I. transcripts of imports and exports (the source used also by W. O'Sullivan), see Sheila O'Keeffe (Sr. Camillus), 'Commercial and industrial change in Cork city from the act of Union to 1826' (unpublished M.A. thesis, National University of Ireland, 1972) [hereafter O'Keeffe, 'Cork'].

118. Wakefield, Account of Ireland, i, p. 752.
than the growth of bacon exports were changes in the tallow trade: by 1800 tallow itself was disappearing as a significant export and in its place, candle and soap exports greatly expanded; thus amid a contraction in the volume of slaughtering the number of chandlers in the city remained fairly constant. \textsuperscript{119} Tallow exports averaged about 560 cwt. p.a. between 1800 and 1813 whereas candle exports, which had been growing over the last quarter of the century, averaged about 5,170 cwt., soap exports about 3,670 cwt., the main market for both being the West Indies. In the case of shoes also, a modest trade to the Caribbean grew from the 1780s: in the fourteen years ending 1813, an average of 3,446 lbs. of shoes were exported. At the other extreme, the export of livestock and hogs from Cork developed shortly after 1800, mainly it seems to Welsh ports, and from the beginning was attacked for its threat to local employment and to one of the staples in the diet of the urban poor, offal; \textsuperscript{120} between 1802 and 1813 an annual average of 2,455 cattle and 6,301 pigs were shipped.

*   *   *

Butter and beef and the diversity of their external markets can therefore be seen as the most powerful influences behind Cork city's growth and the relative eclipse of subsidiary market centres, both ports and inland towns. The marked revival of economic activity in centres outside Cork in the last quarter of the century can be closely related to the expansion of grain and grain-based exports, destined almost exclusively


\textsuperscript{120} \textit{Hibernian Chronicle}, 4 Feb. 1802; \textit{Boyle's Freeholder}, 13 June 1813.
for British markets. But grain was of course a key market commodity long before the 1780s, and this can be observed in three ways.

Firstly there had been the local or intra-regional trade. As earlier chapters have suggested, the extent of tillage in a number of districts remained considerable throughout the period, and corn was a major element in the diet of nearly all social groups until the last decades of the century; the trade in corn between farming districts in the region has already been noted, and many rural consumers even in tillage districts were at least partly dependent on purchased breadcorn or meal in the course of the year. There were probably never fewer than thirty towns and villages in the region holding regulated or unregulated weekly markets at which the sale of corn and meal to industrial, craft and labouring households would be the central feature. And the primary staple of Cork city's growing urban population, oats and oatmeal, had to be purchased at the municipal corn market which local producers in the main supplied. In most years the local demand for wheat was smaller; urban buyers were generally bakers who could by-pass the established grain market and buy by contract: bread and 'biscuit' was then retailed in the city, but these 'dry provisions' were at times also important commission items, especially for naval victualling in wartime.

There was also an export trade in the second, third and fourth decades of the century (see Append. table xiv): this was chiefly in raw barley - although the volume of wheat exports between 1710 and 1715 was also large. The peak in barley exports was reached in 1737-9 when nearly five and a half thousand tons of barley p.a. was being shipped out of the region. This
corn surplus was mainly destined for Portugal and Spain (for animal feed). In some years Youghal participated, notably in the late 1730s, but only then did its exports exceed half of Cork's total. Barley, seldom being used as a breadcorn, was not sold in city markets; rather merchants dealt directly with the country, contracting with individual producers or country dealers after inspecting samples brought to the city. This external trade, very large by contemporary Irish standards, was fairly unstable, and resulted not so much from high prices overseas, as the lower return which oats and particularly wheat production offered the tillage farmer in a period of internationally depressed cereal prices. And the need for an export bounty especially on wheat, along the lines of contemporary English legislation, was the conventional wisdom.

Contemporary consciousness of the English export bounty was heightened by developments after the 1720s: from that time near-regular import of mainly English grain developed, notably in wheat, and this was to become sufficiently enduring as to constitute in effect a third aspect of the local grain trade. The superiority and competitiveness of English wheat lay of course in more fundamental factors than an export bounty, but the sight of several thousand quarters of wheat being imported each year by Cork merchants was galling to those inland: 'corn ... is like to continue mere dirt [in price]', William Taylor observed in 1732; 'England, Holland and the plantations are able to undersell us in our own markets; the flour, of the

122. 'Discourse between two countrymen', (loc. cit.).
123. E.g. Stephen Winthrop, London to Lord Perceval, n.d. [spring, 1744/5], Egmont MSS (B.L. Add. MS 47,008B, f. 78); Rye, Considerations on agriculture, pp. vi-vii.
latter especially, is so much finer and cheaper than ours, that nothing else, in all pastry work especially will go down among us'. Flour in fact only came to be imported on an equivalent scale to wheat from the late 1740s, but these complementary items undermined local wheat production, as well as providing - at least in years of poor domestic harvests - an emergency if more costly alternative to oats and/or potatoes: in the year 1745/6, a time when the local harvest situation seemed as disastrous as in 1739/40, but when international supplies turned out to be much more plentiful, 4,151 tons of wheat were imported to Cork, but only 580 tons of barley and a mere 171 tons of oats, which altogether proved sufficient to avert the expected famine in the region; such imports were not in fact matched again during the century.

This import trade was wholly concentrated on Cork city, and its primary effect was to maintain the food supply there: indeed this reflected the priority of the Corporation which developed an unusually active policy of commissioning local merchants to import grain in the worst years of the 'forties and later; it had a public granary built about 1739. The wider result of this pattern of imports was for the prices of wheat in inland markets to be anything up to a third dearer than at city markets; in the years of scarcity when wheat was more generally consumed, this differential could spread even to barley. Such a phenomenon was hardly surprising

125. Rye, Considerations on agriculture, pp. v-vi.
126. Five tons of flour were also imported.
127. Caulfield, Cork, pp. 584, 591, 609.
128. In May 1742 when wheat was 18/= per barrel in Cork, it was 21/4 at Mallow, and in Oct. 1744 when it was 10/= - 11/= per kilderkin at Cork, it was 14/= at Kanturk; barley at the latter time (a disastrous season) was 3/5 per kilderkin at Cork, 4/3 at Kanturk: William Cooley's journal, 20 May 1742; Richard Purcell, Kanturk to Lord Perceval, 16 Oct. 1744, Egmont MSS (B.L. Add. MS 47,004A, f.55; 47,001B, f. 86).
when supplies were coming from Cork, for inland producers of corn, lacking water transport asserted that up to half the market price for corn taken from north Cork to the city could be absorbed in transport costs. In this situation where the white-corn consuming segment of the population was largely dependent on imports, inland distribution must have normally taken the form of flour rather than of wheat itself, some of this being locally ground; the builder of one of the first flour mills in the region (prior to 1750), Augustus Carré, was also a major grain-importer.

Barley and malt in some years in the 'fifties and 'sixties were also imported in quantity, but this can only have been to top up the local supply for malsters and brewers. Oats on the other hand were very rarely imported, for although the local surplus as represented in exports was never significant, the coasting trade in oats and meal - to Dublin and ports in east Ulster - had been a continuous feature since the difficult years of 1708-9, and remained of importance. Its dimensions are uncertain, but it clearly formed only the tip of local oats production. A sign of developments to come, it was most actively pursued out of ports and havens away from Cork city. There were at least two reasons for this; coastal ventures were small operations - both financially and physically - making use of fishing hookers and colliers in ballast. Also grain was coasted in association with potatoes, a far more bulky cargo reinforcing the decentralization of trade.

129. Cf. petition of Francis Clerson, n.d. [late 1730s], Egmont MSS (B.L. Add. MS 47,007B, f. 58).
130. Smith, Cork, i, p. 217; Caulfield, Cork, p. 601.
131. This is implied in Christopher Crofts, Cork to Sir John Perceval, 27 Jan. 1709/10, Egmont MSS (B.L. Add. MS 46,978*, p. 297 [N.L.I. Mic. p4,674]).
Dungarvan with its fishing traditions, an accessible local grain and potato surplus, and away from competing local urban markets, was probably the single most important centre throughout the century. The other reason why the coastal oats trade left Cork, and to an extent even Youghal, was because of the very real fear merchants had of the local urban consumer: food riots, first recorded in Cork in 1709 and repeated on several occasions in years of high grain prices, were directed against the premises of those merchants tempted to ship oats or meal in spite of high local markets, to other provinces where even higher prices prevailed. Thus the Bensons turned down a Belfast order for meal in Nov. 1756 'it is not in our power to execute your order ... as our mobs are outrageous and unruly that they won't suffer any to be exported, nor any other kind of grain'.

However even the coasting trade originating outside the city did not always escape in periods of excessive prices: two potato boats 'from the west' en route for Dublin were intercepted off Dungarvan in April 1766, and their cargoes landed and sold in the district.

Three decades separate the decline of the old barley trade to Iberia at the end of the 1730s and the resurgence of cereal exports out of the region. The long-term price trends and the transformation of England from

132. Ibid.

133. Paul and James Benson, Cork to Daniel Mussenden, 31 Oct. 1756; however compare this with a letter from Francis Carleton, Cork to Mussenden, 17 July 1755 where such an export was being contemplated, Mussenden MSS (P.R.O.N.I. D354/293A/5/282, 411). For other comments on fear of mobs, see John Scott, Cork to Thomas Dillon and co., Dublin, 25 Jan. 1739/40, Dillon MSS (N.L.I. Mic. p2,762); Caulfield, Youghal, pp. 485-6.

134. Even Earl Grandison's agent conceded that 'these pirates who bring in the potatoes from off the high seas are of very great relief to all the country': Christopher Musgrave, Dromana to Earl Grandison, 8 April 1766, Villiers Stuart MSS C/15.
grain exporter to grain importer are obvious enough, but the manner in which the region responded commercially to this was fairly complex.

**TABLE 6:iii**

Coastal shipping to Dublin under bounty (cwt.)
(ex all ports in the region)

<table>
<thead>
<tr>
<th>Average p.a.</th>
<th>Barley</th>
<th>Oats</th>
<th>Wheat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1758-66</td>
<td>3,184</td>
<td>4,022</td>
<td>1,103</td>
</tr>
<tr>
<td>1767-75</td>
<td>1,837</td>
<td>8,734</td>
<td>5,272</td>
</tr>
</tbody>
</table>

The creation of the first effective high bounty on corn in 1757 - on its carriage from inland parts to Dublin - was of little immediate importance to Cork; its 1767 extension to include coastal shipments to the capital stimulated the pre-existing trade operating mainly from the Youghal/Dungarvan area to Dublin, but the total volume was still small. More important was the reappearance of a trade to England, mainly in oats, that developed (without any bounty) in the course of the 'seventies: it also was predominantly from the eastern ports of the region, and by the end of the decade about five thousand tons of oats were being exported from the Youghal revenue district, seven times the amount that was being shipped to Dublin. 135

In the late 1780s the growth of oats exports from Youghal accelerated remarkably; they reached a plateau in the 1790s, where they levelled off in spite of continuing upward price trend. It is unclear how far the new corn merchants of Youghal were working on English commissions; in the last quarter of 1791 at least half the cargoes from Youghal and Cappoquin were shipped off by local merchants 136 and by this time there was a very large fleet of locally registered vessels - fifty-two in 1787, 146 by

135. For this and subsequent discussion see Append. tables xv, xvi(a) and xvi(b).

1796, all 'coast and corn' and of about forty tons on average. Grain dealers were active in quay extension in Youghal itself from about 1780, and up the Blackwater there were dealers at Tallow and Cappoquin who constructed stores and brought corn down to Youghal by lighter where it was usually transshipped. Indeed supplies from up river appear to have been increasingly important: Youghal's urban tolls which had been let at about £100 p.a. in the four years after 1772, were twenty years later let at an average of £467; however the value of market tolls as such only increased by 133% over this period, whereas that of tolls on river traffic jumped by 980%.

A decline in the relative importance of established corn markets was common to the whole region. In the early stages of the revival of corn trading, markets enjoyed increased activity—the Cork city market was extended from two to four days per week in 1771—and in the mid-1780s the city corn market tolls were being let for about £900 p.a. (nine times the 1733-4 level). However after that time they declined sharply.

137. Account of the number of ships and vessels belonging to the several ports of Ireland ... 1796 (P.R.O. T/64/182).
139. Peter Hennis, Youghal to the Revenue Commissioners, 1 March 1792, Miscellaneous customs papers (P.R.O.I. IA.43.4 no. 10).
141. Caulfield, Cork, p. 862.
142. Ibid. pp. 525, 1061.
143. Ibid. p. 1061.
There were three major developments which led to the market being by-passed; firstly there was the rise of a country commission trade in grain, secondly there was the spread of rural flour mills and thirdly commercial malting greatly expanded. Transport costs and the unpredictability of the city market discouraged the consolidation of a centralized market such as existed in butter. And the country corn stores built to receive local grain were in some cases owned by Cork city corn dealers, others by those whose major business was to make purchases according to the scale of orders from Cork, offering to buy at rates determined by Cork. At least until the 1790s, oats and barley purchased for Cork in this manner were mainly drawn from coastal districts, and the new corn stores were generally close to shipping points for the city, at harbours such as Courtmacsherry, Clonakilty, Glandore and Castlehaven. One such nodal point was Ballynacorra south of Midleton: from at least the 1750s it had been the site for a malt-house and several barley stores beside a large quay; in the late 1780s two leading Cork merchants, John Anderson and John Lapp, built a major store there, and Anderson extended the buildings in the nineties, investing over £1,000; adjoining him a local farmer constructed at that time a store which covered 8,730 square feet. By 1797 there were some eight corn stores as well as large maltings (owned by a Cork distiller) in the neighbourhood. Cork-owned stores appeared at a

144. Copies of conveyances, John Lapp to John Anderson, holdings at Ballyedmond, 24 Aug. 1791; John Anderson to Samuel McCall jr, Charleston, 18 May 1799; George Armstrong to John Halleran, stores at Ballynacorra, 13 Nov. 1854, (in possession of Mrs West, Charleston, Midleton, co. Cork); Cork Journal, 8 March 1754.

number of points along the region's coast, even in the west of Bear. The Revenue Commissioners' policy of discouraging the use of landing points other than those fully recognised and serviced by customs officials curtailed smaller centres from entering cross-channel trade on their own account, and even the coastal trade was subject to regulation, particularly as regards flour and wheat. Nevertheless maritime traffic in grain did reactivate subsidiary coastal towns and villages from Dungarvan to Bantry: in 1787 there were sixteen vessels registered in Kinsale district, twelve in Baltimore (which included Castlehaven and Bantry); by 1796 this had jumped in the former to fifty-four, in the case of Baltimore to forty-three. Such vessels were admittedly no more than small coasters (between them averaging no more than about thirty-three tons), and they were insufficient to handle all the Cork and Dublin-bound grain, malt and potatoes. Welsh and Scottish colliers carried some grain across the channel, and in the slack season for the Dungarvan fishery, boats from there came to harbours west of Kinsale and shipped grain and potatoes for Dublin.

The price differential between city and country markets was mainly dependent on distance from Cork. But because of economies of scale in transport costs, the country buyer or factor could offer prices sufficiently close to city levels to deter producers from travelling: in the Lisgoold district (about ten miles from Cork) it was apparently standard practice

146. Weld, Scenery of Killarney, p. 213.
147. [Copy], Revenue Commissioners, Dublin to the Collector of Kinsale, 8 July 1791 (Kinsale port letterbook no. 3, 1790-1, Custom House Library, London).
148. Account of ships, 1796 (loc. cit.).
149. [Copy], Revenue Commissioners to Collector of Kinsale, 8 July 1791 (loc. cit.); [copy, Collector of Kinsale] to Revenue Commissioners, 1 Oct. 1795 (Kinsale port letterbook no. 11, 1795-6).
in the 1790s for local stores to offer on a barrel of barley only 1/= less than the going Cork price, i.e. about 2½-4%, 'to which he [the farmer] cheerfully submitted'. Factors on shipping grain to Cork seem to have received from their city principals a commission of around 5%. With fickle markets, fluctuating demand and the pattern of delegated purchasing, there was no development of seasonal advances to producers; indeed the reverse sometimes operated, where purchases were made with the agreement that payment would be made and the prices fixed according to what was the ruling local price at some future date. Supplies generally came to the stores unsolicited, or at most were prompted by notices given of current prices put up outside chapels. Instead farmers were much freer agents as to when and how they sold their crop; increased farm incomes which followed the upward thrust of cereal prices, especially after the early 'nineties, permitted many to space out the thrashing and marketing of their harvest over many months; as one Cork merchant observed in April 1796, 'our farmers are so rich they can afford to hold over'. In a survey of grain reserves in the Castletownsend [Baltimore] district made at the end of January of 1796, the Collector estimated that half the 1,800


154. Copy, Hewitt , to John Walker, Newry, 1 April 1796; cf. copy , Thomas Hewitt jr to Roger Lawson, Newry, 24 Nov. 1800, Hewitt letterbook.
tons of oats produced locally 'beyond consumption' and a third of the
2,700 tons of barley remained in the hands of farmers; 90% of the small
wheat crop had however come on to the market, half being still in the hands
of local millers and merchants, and half had apparently left the district. Merchants could and did retaliate against 'hoarding' farmers who waited into
the spring for prices to rise: city barley buyers in 1797 for instance com-
bined to keep down prices by the use of several strategems; they created
what one writer regarded as a meaningless price distinction between 'pale'
and 'high-coloured' barley, downgrading most of the barley that came to
market; they refused to buy by sample; they offered for very short periods
highly attractive prices to the country, then withdrew them; only three or
four buyers in the city remained open at any one time, offering the agreed
depressed price; and to undermine the country buyers they refused for a
time to accept any barley brought by boat (i.e. from the coastal corn stores)
to the city. The cartel succeeded for a while in bringing down city barley
prices to almost half those at Youghal.156

City corn dealers were thus a powerful if seldom united body; some
who were purely dealers were based in the Blackpool district, and bought
and sold freely; others who were millers, malsters, brewers, distillers
or merchant shippers bought both from them and from the country, men like
Thomas Hewitt the distiller who had agents buying simultaneously in
Midleton, Skibereen, Bantry and other points in between.157 It was the

155. Table of the harvests of 1794 and 1795, Pelham MSS (B.L. Add. MS
33,118, ff. 291-2). The date of the information on the 1795 harvest
can be fixed from copy letter, [Collector of Kinsale] to Revenue
Commissioners, 27 Jan. 1796, Kinsale port letterbook no. 11.
156. Warren, A political and moral pamphlet, pp. 159-165.
157. General ledger 1794-1802 of Hewitt and co., Cork Distillers MSS.
Cf. advertisement of James Bonwell, city distiller to buy from the
country, Hibernian Chronicle, 3 Feb. 1780.
FLOUR MILLS constructed
before 1800
behaviour of these various city buyers and their manner of direct or commission dealing which upset the principal urban markets, and on whom price rises were usually blamed.¹⁵⁸ However a regulated grain market, designed to cater for what was becoming an industrial raw material and an export commodity exclusively, was only instituted a generation later in 1823.¹⁵⁹

A second factor fragmenting the grain market was the diffusion of the country bolting mill. This process did not begin for more than fifteen years after the introduction in 1758 of the inland bounty on flour and corn brought to Dublin. Two of the three mills near Cork city in existence before 1750 were the only ones to benefit from the bounty on flour in the early years, sending significant quantities from 1767/8.¹⁶⁰ In contrast to this, in the last five years of the bounty (1791/2-1796/7) 99.7% of the flour despatched from the region inland to Dublin came from the north-east lowlands, from the Fermoy/Condons district. This was coming from large, sophisticated multi-storied watermills, in the financing of which local landlords were prominent - St. Leger St. Leger at Rockmills (in production from 1772-3), Arthur Hyde at Castlehyde (1775/6), Nicholas Green at Park Mills near Doneraile (1783/4). Flour was also coasted to Dublin in smaller quantities from similar mills (also with landed support: Sampson Stawell at Kilbrittain, Thomas Somerville at Castletownsend). By the end of the

¹⁵⁸. E.g. see account of attack on a publican/corn dealer in Blackpool, Hibernian Chronicle, 14 April 1791.


¹⁶⁰. One of the Glanmire mills, and that at Barnahely; a little was also sent from the Cross's Green mill in the city: J.H.C.I. VIII, cccxxxix-x; IX, cccxvi-iii, dxiv. Barnahely mill was repaired and a new cleaning device installed just before it commenced to send flour to Dublin: see advertisement in C.E.P., 2 Feb. 1767.
century there were about thirty-two flour mills across the region. 161

Landowners' enthusiasm for their construction was understandable: by creating a local demand for wheat in a neighbourhood they accelerated the expansion of cereal production and raised land values. The impact of flour mills near Clonmel on agriculture in south Tipperary in the late 1760s was an example for north Cork to follow; the successful establishment of Rockmills near Glanworth a few years later was dramatic confirmation, and as with other first-comers to a district, profits there were reported to have been high in the early years, before local competition existed from the nine other mills that grew up within about fifteen miles of it, in the 1780s and 1790s (see Map 6). 162 The pioneer mills therefore preceded local supply, whether in Fermoy, west Carbery or the Killarney neighbourhood. 163 They became local wheat markets, for unlike earlier rural mills, they 'never grind but on their own account', 164 and they organized the marketing of their flour in Dublin or Cork. Payments to the country were not in advance, and might be delayed until millers could draw on their Dublin flour factors; promissory notes were in such circumstances given out when the wheat was delivered, and on occasion these circulated. 165

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161. The Dublin trade is recorded in the accounts of bounties paid on the inland carriage of flour: J.H.C.I. IX, cxxi, ccxxcvi-iii, dxiv; X, xlii, clii, cclxxiii; XI, lvi, lx, cclxxiii; XII, lxxii, ccc, d1xxvi; XIII, lii, cclvii-xi; XIV, clxxxvi; XV, cclxvi; XVI, cclxvii; XVII, cclxvii. Evidence for other mills has been drawn from a wide variety of sources, mainly newspapers and letter-books of the Commissary-General, Cork, 1798-1800 (T.C.D. MS 1,182/1-2).


163. See above pp. 324, 342, 352.

164. Copy, [Paul Singer], to Col. Handfield, 11 July 1798, letterbook of the Commissary-General, Cork, i, 1798-9), f. 29 (T.C.D. MS 1,182/1) - hereafter Com./Gen. letterbook.

165. E.g. copies, [John Purcell], Grage to Lady Clerawley, 28 Nov. 1783, 30 Nov. 1784, Ryan Purcell MSS (Cork Archives Council).
Flour sent out of the region was in most years destined for Dublin rather than exported abroad. The complete withdrawal of the bounty in 1797 had traumatic short-term consequences, but because of the buoyancy of demand from Cork the mills, even in the north of the region, gradually redirected their output southwards. Some of the Cork demand came from an expanding bakery trade: there were at least twenty-eight commercial bakers in the city in 1787. Part of their market lay in ship victualling, but bread exports to England and Iberia were growing; total exports, from a level of about twenty-five tons p.a. in the mid-1770s stood at 167 tons in 1791/2, 413 in 1804/5. Official demand during the French wars for bread and flour became the single most important determinant of the market, which was increasingly controlled by the great contractors such as Daniel Callaghan, who in 1796 built the massive St. Patrick's mills in the Glanmire valley. The decline of the public markets for wheat as well as oats, coinciding with higher prices, brought public odium particularly on those millers near urban markets, as the food

166. Copy, [Purcell], Highfort to the Earl of Egmont, 3 June 1797, Ryan Purcell MSS.

167. Townsend, Cork, pp. 29-30. However for a comment on the dominance of Dublin prices on the Cork city flour market more than a year after the withdrawal of the bounty, see copy, [Singer] to Handfield, 11 Dec. 1799, Com./Gen. letterbook ii, f. 85.


169. This is suggested by the pattern of flour exports after 1800 - only exceeding 150 tons p.a. once before 1811/2: cf. O'Keeffe, 'Cork', 19.


171. E.g. article entitled 'The auction' in The Museum, 10 (Cork, 13 July 1796).
riots of the autumn of 1792 demonstrate: an urban mob from Bandon began by attacking two local flour mills; then they marched six miles to the mills at Kilbrittain, and a further eight to those at Shannonvale (near Clonakilty) doing substantial damage to the former and burning down the latter; it required army intervention to end the disturbances. In Cork itself there was no trouble but within days the Corporation was seeking an embargo on exports and starting a relief subscription to purchase grain and resell it below the market rates; an army presence may also have helped. In following years mayoral proclamations against those who bought grain away from the market were repeated with no apparent effect; the erection of public ovens in 1795 by private and municipal subscription was probably some help in maintaining a relatively cheap local bread supply.

The attacks of 1792 were directed on flour mills not just because of their supposed influence on wheat prices, but because they also ground oats in many cases, and had became the centres of grain export. Milling

172. Copy, [S. Stawell], Kilbrittain to E. Stawell, Dublin, 9 Dec. 1792, Stawell MSS (P.R.O.N.I. M6,954); Thomas Garde, Dublin to John Heaton, 29 Nov. 1792, Devonshire MSS (P.R.O.N.I. T3,158); Hibernian Chronicle, 22 Nov. 1792; C.E.P., 26 Nov., 3 Dec. 1792; Bennett, Bandon, p. 447. For an earlier instance of the Bandon mob attacking stores-houses at Glandore, see James Gould, Cork to Maurice Connel, 13 March 1778, O'Connell MSS (U.C.D. School of Archives A/11/14).


175. C.E.P., 1 Nov. 1794, 15 Oct. 1795.

176. Barnahely mills diversified into oats and oil grinding sometime after 1772: Hibernian Chronicle, 31 March 1785, and St. John's in the city also ground oats: C.E.P., 16 July 1792. Some oatmeal mills were apparently operated on similar lines to flour mills; for instance the manager of Millfield mills near the city was advertising to buy oats brought there and was also publicizing oatmeal for sale in the city: C.E.P., 25 Jan. 1796.
and corn dealing clearly overlapped; for instance Stawell of Kilbrittain and Sealy, a Bandon miller, were separately involved in oats shipments to the south of England in 1795. This was a logical diversification because grain shippers in general had to have extensive stores and kilns for drying the proverbially damp corn that farmers brought to market. Flour milling was simply the most capital intensive (and perhaps the most profitable) aspect of a combination of activities.

The malting trade had certain similarities with flour milling (although there were little overlap): maltsters largely traded on their own account, and maltings became in many country areas the main market places for barley; the promissory notes of malsters also circulated. But the malting process was simpler and maltings could be quite small. The market for malt was divided between local brewers and distillers (some of whom were themselves malsters) and Dublin malt buyers. Barley when malted expanded in volume, but being presumably drier than unprocessed grain was slightly lighter; thus as far as transport costs of the commodity itself were concerned, location in relation to final markets made little difference. But there were two other determinants of location; firstly the fuel used in the drying stage in all but the smallest maltings was

177. Copy, [Collector of Kinsale] to the Revenue Commissioners, 2 Dec. 1795, Kinsale letterbook no. 11.


179. But some mill owners were also malsters: Thomas Somerville of Castletownsend was returned as owner of malt-houses in Skull, Skibbereen and Rosscarbery, while Robert Sealy of Bandon was both miller and malster in that town: account of the number of malt-houses, 10 March 1796, J.H.C.I. XVI, cccxx-cccxvii.

180. E.g. copy, [John Purcell], Highfort to Lady Glawley, 8 Jan. 1787, Ryan Purcell MSS (Cork Archives Council).
culm, not turf or wood. Kilkenny culm coasted from New Ross was thought best, but that mined in Duhallow from mid-century was also used in north Cork; fuel costs (except in the latter district) were presumably lowest along the coast. Secondly, malting grew up near the centres of brewing and distilling; those industries were widely but unevenly distributed, but the major concentration of capacity, as large-scale investment developed in the 1790s, was in Cork city and a few of the larger towns — Bandon, Fermoy, Clonakilty. Indeed their development, and the 1785 tax on malt, were together responsible for a distinct change in the number and distribution of malt-houses: in the first year of the tax, 258 malt-houses were recorded in the region; in 1796 this figure had fallen to 151 but the decline had taken place almost completely in the Mallow and Youghal excise districts — in the former the number had fallen by three-quarters. 181 This change presaged growth, not decline in total capacity. In 1796 the move to the coast and the city is apparent in the more specific information on location, in which the association of small-scale operations with inland location becomes clear: the city not surprisingly contained over half the total capacity of the region, and its share of brewing and distilling was certainly larger, but nonetheless the proportion of malting activity outside the city is impressive.

181. Account of malt-houses, 25 June 1785, J.H.C.I. XI, dcccvii; account of the number of malt-houses, 10 March 1796, J.H.C.I. XVI, cccxx—cccxlii. On the impact of the 1786 duty see copy,[Purcell] to Lady Glerawley, 10 May 1785, Ryan Purcell MSS.
### TABLE 6:iv

#### Malting capacity 1796

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of total capacity of the region</th>
<th>Average cistern size</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-west coast (Bantry, Skull, Skibbereen, Ross, Clonakilty, Kinsale)</td>
<td>9.4</td>
<td>32</td>
</tr>
<tr>
<td>West inland (Dunmanway, Inniskeen, Bandon, Macroom)</td>
<td>4.5</td>
<td>17</td>
</tr>
<tr>
<td>Cork city</td>
<td>56.1</td>
<td>63</td>
</tr>
<tr>
<td>East coast/Blackwater navigation (Cove, Cloyne Midleton, Youghal, Dungarvan, Lismore Tallow Cappoquin)</td>
<td>20.0</td>
<td>43</td>
</tr>
<tr>
<td>North inland (Mallow, Doneraile, Charleville, Kanturk, Mitchelstown, Castletownroche, Kilworth, Castleyons etc.)</td>
<td>8.5</td>
<td>27</td>
</tr>
<tr>
<td>South/central Kerry (Killarney, Tralee, Dingle Milltown)</td>
<td>1.5</td>
<td>9</td>
</tr>
</tbody>
</table>

**Source:** J.H.C.I. XVI, cccxx-xli.

The largest urban brewers in 1796 (Beamish and Crawford) and the largest distiller (Thomas Walker) between them owned more than a third of Cork city's malting capacity. Walker who had moved from brewing in Mallow to distilling in Cork in the late 1780s,\(^{182}\) had built the largest complex of maltings in the kingdom because, he claimed in 1792, the quality of malt in the region was so poor; he suggested that the growth

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\(^{182}\) See Walker's advertisements in C.E.P., 31 Jan 1788, 26 Feb. 1790; account of the number of stills licensed in the kingdom, 1781/2, J.H.C.I. X, dxxx.
of demand in Cork and Dublin had led to a great extension of capacity. Certainly from insignificant levels in the early 'eighties, malt grew to become a major bounty item coasted to Dublin in the 1790s, about half from Cork city, half from the lesser ports (see Append. tables xvi (a) and xvi (b)).

Of the three major sectors of the grain trade, oats/oatmeal, wheat/flour/bread and barley/malt, it is clear that oats were the most valuable element by their sheer volume, but the one where the proportion leaving the region in processed form was smallest: between 1782 and 1796 5% of oats or oats equivalents left as oatmeal. Wheat and flour formed the second largest export out of the region in volume and value; flour formed about a sixth of this trade in volume, and bread perhaps a further tenth. Barley and malt formed the smallest export out of the region, but processed barley i.e. malt, formed three-fifths of this. For the malt trade it is possible to relate this to total production: in the mid-1790s the percentage of malt recorded as leaving the region to the total taxed was about 40%. Such a high level of processing and such a large proportion consumed domestically were unlikely to have been matched in other sectors; it was a measure of the dynamism of local brewing and distilling at the end of the period.

* * *


184. This assumes a 5:4 conversion rate for oats to oatmeal in terms of weight.

185. This assumes a 5:3 conversion rate from wheat to flour (cf. L.M. Cullen, 'Problems in the interpretation and revision of eighteenth-century Irish economic history' in Transactions of the Royal Historical Society, 5 ser. xvii (1967), 19, fn.3) and an (arbitrary) 1:1 conversion rate for flour to bread.

186. This assumes an (arbitrary) 10:9 conversion rate for barley to malt.

187. This estimate is based on a comparison of the account of malt duty paid 24 Jan. 1797 (J.H.C.I. XVII, xliv) with recorded outward movement from the region of malt in 1796/7.
Cork city was therefore the market place for most of the export staples over the greater part of the period. The importance of its merchant community as the cardinal link between external demand and hinterland production is obvious, but to what degree was it actively exploiting the opportunities of international trade, as opposed to being merely the passive agent of foreign principals or the local landed class? The reference already to the prominence of commissions from England, Holland and France implies a major element of passivity in the economic behaviour of export merchants, and would seem to deny them any responsibility for the region's massive growth of foreign trade. As always, the reality was not clearcut.

The rise of the commission system in the late seventeenth century coincided with the formative stage of European exploitation of Caribbean island colonies, and of the mercantilist framework inside which this was to operate for the next one and a half centuries. Prior to the permanent tightening up of the British Navigation Acts in 1685 and 1696, prohibiting the direct importation of respectively enumerated and unenumerated colonial goods into Ireland, local merchants had dabbled in independent ventures to the sugar islands, but even then the greater economic resources of the merchants of Bristol, London, Liverpool, Whitehaven and other English west coast ports, their ability to finance long-distance voyages and their contact with a wider and more affluent domestic market, enforced a primarily service character on Irish ports supplying provisions for planters, mariners and slaves. Ireland, like Madeira (which provided wine) and west Africa (slaves), quickly became part of a new multilateral Atlantic trading zone.

188. See above pp. 50-1.
The main features of Cork commission trading had been established by the 1680s whereby advance orders were given to purchase, pack and lade provisions on ships usually owned by the principals, which duly called to the harbour. The standard commission fee of 2½% on outlay was to remain unchanged over the following century. Local merchants were not of course legally prevented from shipping provisions on their own account and on their own vessels to the Caribbean, but if colonial goods were to be shipped eastwards in return, they had to be routed via Britain. Such ventures were not unknown, indeed were modestly important in the late seventeenth century, but thereafter they were little in evidence, as Jamaican samples illustrate:

TABLE 6:v

<table>
<thead>
<tr>
<th>Ships recorded as touching at Cork</th>
<th>Ships consigned from Cork (total)</th>
<th>Cork-owned ships consigned from Cork</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 Sept. 1728-24 Sept. 1729</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>June 1748- June 1749</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Sept. 1752- Sept. 1753</td>
<td>53</td>
<td>4</td>
</tr>
</tbody>
</table>

Sources: P.R.O. C.O./142/15/29-32; /98-167; C.O./142/17/B2; /C1-3.

In the case of the French colonial trade, ships were permitted by the French authorities to victual in Irish ports between 1727 and 1741, and commission dealing was done at Cork similar to that with British principals;

189. Hovell letterbook (loc. cit.), passim.

190. The general absence of Cork ships on the Caribbean trade was made explicit by Richard Hare to Thomas Edisforth, 7 March 1772, Hare letterbook, p. 252.

Dutch and Danish commissions for their respective colonies were similarly handled.

There were ways however in which Cork merchants could extend their participation and their profit in the colonial trade. One method was to consign goods on their own account (or jointly) on English, French or Dutch ships to their respective colonies. This was certainly resorted to in wartime, when normal trading with France and its colonies was interrupted. Later in the century, when Liverpool became a major market for local grain exports, butter (at least) was shipped there for forwarding on Cork account to the Caribbean. It seems unlikely however that such practices were extensive. Another means of enlarging local profit was the practice of some commission merchants to provide credit to their principals by not drawing bills on them for six months. At the beginning of the century, even such a leading merchant as Joseph Franklyn sought to draw on his principals immediately on purchase as a matter of course. In contrast Richard Hare in 1771 gave six months credit (at interest) to his friends, although all his city purchases were paid for in cash or in advance; others gave even longer credit at that time. Another initiative taken inside the confines of the commission system was the re-export trade in fish.

194. 'Francklyn letterbook', 60. All Pelet's Cork correspondents similarly drew on his London correspondent as they made purchases - e.g. Augustus Carré, Cork to Jean Pelet, Bordeaux, 7 Feb. 1728/9, Pelet MSS (A.D. de la Gironde 7.B 1779 [N.L.I. Mic. p4,013]).
This was mainly restricted to herrings, the import of which developed in the 1760s, coming mainly from Sweden; its herrings were preferred to Irish or Scottish ones because they kept better in the tropics and were available at the time of Cork's slaughtering and export season, whereas the Irish autumn fishery was too late. Some of the Swedish herring was consumed domestically, but between 1765/6 and 1778/9 an average of 18,031 barrels of 'foreign' herring and 1,182 of British origin were imported on Cork account, rebarrelled in some cases, and re-exported mainly to the plantations in conjunction with other provisions. A small volume of Irish herring was also sent out and, with the extended development of the Irish fisheries - particularly around Donegal - in the 1780s, coasted herring replaced the import article in Cork re-exports.

One Cork house was involved in a Killybegs (Donegal) fish processing partnership which was launched in 1782 with a capital of £3,000.

If the Atlantic provisions trade was largely a commission one, the continental trades provided a contrast. Much of the trading to France was on local account and to Iberia almost completely so. In the traffic with Nantes and Bordeaux, exports were often on joint account, the co-partners being based in the port to which goods were consigned; usually

196. [Copies, Hare] to Messrs Arreidson and son [Gothenburg], 6 Nov. 1771, 7 March 1772; to John Kensington, London, 13 March 1772; to John and David Brown, 12 May 1772, Hare letterbook, pp. 184, 256, 260, 324-5; O'Sullivan, Economic history of Cork, p. 324.


198. Registry of Deeds, anonymous partnerships 1/1, 3 Sept. 1782.

such ventures were arranged with correspondents who had a local or Irish background. In trade to the Low Countries, Germany, Scandinavia and the Baltic, the element of home participation was generally much smaller. Dutch shipping, both in taking off Dutch orders and in the carrying trade, was prominent in the early part of the century, although even then the actual presence of the Dutch in the city was limited. Later in the century trade with northern Europe became less important, although an active trade to the 'East Country' was continued in butter, with timber being the main commodity in return. Doubtless this was largely in Dutch hands to begin with, but by 1784 of the sixteen vessels passing through the Sound travelling either from or to Cork, as many as seven were Cork-registered ships.

Local enterprise was clearest in the Iberian trade, in particular with Portugal: butter, hides and for a while barley were the main outward

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200. For instance, in the sixteen shipments from Cork to Dieppe in 1714, only three were in Cork vessels; four were English and the rest (where ownership is identified) were from the Dieppe region: Amiraute de Dieppe 214. B 9 (A.D. Normandie, Rouen). There was a considerable Dieppe fishing presence along the Cork coast about this time.

201. The only clear case of a Dutch merchant becoming a freeman (under the Protestant foreigners clause) was one Vansevenhoven. For a comment on the strength of the Dutch as carriers of local commodities before the Austrian Succession war, see Stephen Winthrop, London to Lord Perceval, 16 Jan. 1745/6, Egmont MSS (B.L. Add. MS 47,008B, f. 29).


203. H. C. Johnansen, 'Shipping through the Sound: basic tables, 1784' (hand-out at lecture to the Seventh International Economic History Congress, Copenhagen, 1974), table 1.
staples, salt and wine inwards. The importance of Portuguese salt to Cork shippers of beef and pork is the most immediate explanation for the high participation of local merchants on this route; Portuguese salt was being used in preference to French and British by the early eighteenth century, for being slow to dissolve it was particularly effective as a preservative in hot climates. (However being the most expensive it was not universally used, and British and French salts were employed for butter and fish.) There was also an illicit trade to Portugal in camblet cloth (the dimensions of which are discussed in the next chapter), exported from both the city and from the Kinsale district in conjunction with legal goods on local account. An indicator of local complicity in Portuguese trading generally was the impact of the 1755 Lisbon earthquake: its immediate effect on local trading was not dissimilar to that of the South Sea Bubble, and although there were no major bankruptcies, Cork merchants were reported to have lost £54,000 by one estimate, £70,000 by another. Many 'trading people ... having had the greatest part of their substance there', presumably lost uninsured stock, while at Bandon traders were said to have lost up to £14,000.

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204. Carré, Cork to Pellet, 20 Dec. 1728, Pellet MSS; Young Tour, ii, p. 68; Wakefield, Account of Ireland, i, p. 758.

205. Details of ownership of general provisions and/or ships are given in connection with several revenue captures of woollen cloth: minutes of the Irish Revenue Commissioners, 13 Jan., 14 Jan., 24 Jan., 28 Jan. 1731/2 (P.R.O. Customs/I/24, pp. 27, 29, 44, 52); Richard Purcell, Kanturk to Lord Perceval, 15 March 1743/4, Egmont MSS (B.L. Add. MS 47,001B, f. 11).


207. Copy, Conner to Abdy, 19 Dec. 1755, 15 April 1757, Conner letterbook.
Local control of trade with Portugal remained for the rest of the period, but its importance in the city's total commerce declined in relative importance.208

Trade with Britain directly grew markedly in importance, the pattern of the late seventeenth century being reversed. Of course major English participation in Cork's foreign trade had been a feature throughout the century, for quite apart from the scale of commission orders from England, invisibles such as shipping and insurance were always important. London was the undisputed centre for the settlement of international accounts, and French and Dutch bills of exchange were a rarity even in the early eighteenth century.209 Cork merchants dealing with the Continent or directly with the Caribbean would normally draw on the London correspondents of those with whom they were doing business. Foreign bills on Dublin were unpopular, and bills on English outports unless payable in London hard to negotiate.210

208. In 1771 Hare gave no encouragement to a correspondent who was seeking freight to fill a Lisbon-bound ship 'as we have town ships constantly on the trade': copy, [Hare] to George Frederick Willmann, Dublin, 12 Nov. 1771, Hare letterbook, p. 192. Cf. Cullen, Anglo-Irish trade, pp. 18-21.


210. Augustus Carre, Cork to Jean Pelet, 10 Nov. 1728, Pelet MSS; William Pearde, Castlelyons to [?], 27 March 1750, Puleston MSS (N.L.W. MS 3,579D [N.L.I. Mic. p3,263]).
In terms of the financing and control of actual trade with Britain, different staples had different modes of organization; thus the wool trade—which evolved into one in woollen and worsted yarn—to the Bristol Channel and, after mid-century, to Yarmouth and London was conducted in the main on local account, in Cork vessels consigned to English factors. The development of this highly valuable trade and its specialized nature are surveyed below. It seems likely that its success encouraged the shipment of other staples such as tallow on Cork account to England. In volume, the largest import was coal: this grew from about 3,000 tons p.a. at the beginning of the century to 7,570 in 1739/40, then trebled in the next thirty years and quadrupled in the following forty to reach about 90,000 tons in 1810/1. Little of this was carried in Cork ships until the nineteenth century, and up till then Welsh and Cumbrian vessels had predominated. In 1725/6 less than 10% of the 200 voyages to Cork were in local boats, and even in 1796 there were only twenty-seven Cork boats registered as being in the coasting trade, i.e. the type normally involved in coal traffic; (some of the Dungarvan and Youghal sloops were engaged in it to a limited extent).

With the increasingly British orientation of Cork's foreign trade after 1770 the proportion of that trade financed locally diminished, even if local involvement in it grew in absolute terms. Orders from inland English merchants, notably for butter and grain, grew noticeably in the last decades of the century; for example Thomas Hewitt, in his capacity as a butter and tallow exporter in the late 1770s and 1780s

211. S. Lewis, Topographical dictionary of Ireland (London, 1837), i, p. 414.

212. Pembrock memorandum book, pp. 47-52; account of ships, 1796 (loc. cit.).
usually dealt each year with over a dozen correspondents in England, a
number inland, and only shipped on his own account about once a year. 213

The single most important source of demand from Britain was the
Admiralty and the Treasury. Some of this was of a routine nature, such
as contracts to provision garrisons at Gibraltar or Minorca. Cork
merchants held open-ended contracts for these at different times over the
century. 24 Official demand was however primarily associated with wartime
and the preparations for it. With each major European conflict of the
century there was a growth in the volume of victualling provisions re-
quired; this was indicated in two ways. Firstly (as in the British economy)
war moved from being a precipitant of business depression to a stimulant
of economic activity and of prices over the century. The impact of war
on maritime trade before 1713 has been noted above; at that time there was
a natural link between buoyant provisions prices and peace hopes, between
depressed prices and the rumours of war. 215 Even the approach of the
Austrian Succession war brought down most prices in 1738216 while its

213. Butter purchase accounts, 1777-94 of Thomas Hewitt, Cork Distillers
MSS (Cork Archives Council).

214. Cf. abstract of letter, Edward Hoare, Cork to Edward Southwell, 16
Jan. 1704 [15?], Calendar of Southwell MSS (P.R.O.I. MS,036, p. 34);
Treasury minutes, 31 Jan. 1740/1, Cal. Treas. papers 1739-41, p. 437;
Baker, Government and contractors, pp. 79-80.

215. E.g. Kerry Fitzmaurice, Churchtown to Sir John Perceval, 10 June 1709,
Berkeley Taylor, Dublin to Viscount Perceval, 29 Jan. 1725/6, Egmont
MSS (B.L. Add. MSS 46,978*, 46,991*, p. 6 [N.L.I. Mic. p4,674, 4,676]);
cf. Cullen, Economic history of Ireland, p. 56.

MSS (B.L. Add. MS 47,003*, p. 180 [N.L.I. Mic. p4,678]).
extension with the entry of France in 1744 compounded the pessimism of
many in trade, not least because of the threat of French privateers. 217

But this was to be a turning point; even then one reaction to local fears
was that 'whatever people say of a French war, everyone knows that after
the first year it is a benefit to Ireland,' although this comment was
disputed. 218 For while beef prices had previously been on occasions
swelled by official demand, other prices had suffered; in the later years
of the Austrian war however, prices were to be unprecedently high, 219 so
that in 1748 Sir Richard Cox observed at Bandon quarter sessions how 'this
country never flourished more than during the late war ... money ...
hath greatly increased,' 220 and one merchant in 1750 even went as far as
to assert that beef would be 'a drug irretrievable until another war'. 221

Depressed beef prices were also to follow the Seven Years war,
while the adjustments to the ending of the American war were to be
generally traumatic, coinciding as it did with bad harvests. For many
fear of war came to be replaced by fear of peace.

217. E.g. Richard Purcell, Kanturk to Lord Perceval, 6 Nov. 1739;
Purcell, Cork to Egmont, 30 Aug. 1743; Henry Knight, 'Ballinlilly'
to Egmont, 13 July 1744, Egmont MSS (B.L. Add. MS 47,001A f.21;
47,008*, p. 37, 47,009* p. 106 [N.L.I. Mic. p4,679]); [copy], John
Usher to Sir William Abdy, 10 Dec. 1744, Lismore MSS (N.L.I. MS 7,180).

218. 

219. Egmont, London to Purcell, 12 June 1744; William Cooley, Lohort to
Lord Perceval, 6 July 1744, Egmont MSS (B.L. Add. MSS 47,009*, p.85

MSS (B.L. Add. MS 47,008B, f. 29).

220. Sir Richard Cox, A charge to the Grand Jury ... at Bandon-bridge,
12 July 1748 (Dublin 1748), p. 21.

221. John Falvey, Cork to Maurice Connell, 11 July 1750, O'Connell MSS
(U.C.D. School of Archives A/1/3).
Another pointer to the increasing importance of official demand was the increasing frequency of the use of the embargo order. First imposed in 1740 by the government, the embargo on provision exports was to be normally prompted by one of two considerations: firstly there was the belief that access to provisions was a strategic advantage, particularly in prolonged naval warfare, which should be denied the enemy (or the potential enemy);\(^{222}\) secondly there was the need to guarantee that the supplies required by navy and army were channelled to official suppliers. There were some twenty-four provisions embargoes in the following half-century, all for at most a few months, except the one imposed in 1776 for three years on all provision exports except to Britain and the colonies under British control; this action, because of its length, its apparent constitutional implications and its more total effectiveness, became a national controversy.\(^{223}\) The first objective, blocking enemy supplies, seems to have been the uppermost motive in the Austrian Succession and Seven Years wars, but the latter one was foremost in the American war. Its opponents contended that its purpose was merely to favour London contractors - by holding down their purchasing costs\(^ {224}\) - but in fact supply problems at Cork, the sole centre for provisioning navy and army supply ships until 1782, were real enough, as the extensive coasting of various commodities from other centres demonstrates.\(^ {225}\) For Cork an embargo usually had a positive side-effect, in contrast to the situation in other major ports: where provisions exports to the English Caribbean was permitted, it was to be under convoy, and all such convoys from Ireland began at Cork.\(^ {226}\)

\(^{222}\) Cullen, Economic history of Ireland, p. 57.

\(^{223}\) Cf. T. M. O'Connor, 'The embargo on the export of Irish provisions' in I.H.S. ii (1940), 3-11.

\(^{224}\) E.g. David Connell, Cork to Charles O'Hara, O'Hara MSS (P.R.O.N.I. T2,812/17/8).

\(^{225}\) Richard Gordon, Cork to John Robinson, 23 June 1777 (P.R.O. T/1/534, f.120); View of the present state of Ireland (London, 1780), p. 28n.

\(^{226}\) Richard Pares, War and trade in the West Indies 1739-63 (Oxford, 1936),
The system in the American war whereby various city of London contractors commissioned certain Cork merchants to supply all the wet provisions required by army and navy (seemingly at the usual 2½% commission) was a development from the older practice whereby the Navy Board (or the Treasury) had itself given contracts to Cork merchants to provide victuals for a given number of men over a given period at a pre-arranged price per man, or had given commissions to them to make specific purchases in the market. London merchants had always held many of the contracts for victualling garrisons and land forces in the empire, and had passed commissions where appropriate to Cork. Throughout the period Cork (with Kinsale) remained the only Irish collecting point for official supplies, even though the practice of Cork contractors in coasting supplies from other parts of the country was well-known. The fact that Cork absentee landowners - the Southwells and the second Earl of Egmont - had held high office in the Admiralty no doubt helped to maintain Cork's monopoly. The Navy Board opposed the lobby by other Irish ports to become supplementary provisioning points, but in 1782 under the Baring contract such controls were lifted: in 'open' conditions, Cork was still able to supply


228. This at least was the practice at the beginning of the period: Edward Hoare, Kinsale to Robert Southwell, 16 May, 7 Nov. 1693, Kinsale manorial papers, vi (U.C.C. Strong Room).


just under two-thirds of the wet provisions from the country (although Baring dealt with the established Cork sub-contractors unwillingly).\textsuperscript{232}

The subcontracting status of Cork merchants in the American war, in contrast to earlier periods when they had been main agents for the government, was less a reflection on their passivity than on the greater demands of a more total war. Irish wet provisions were only part of official requirements, and dry provisions — flour, meal, bread and biscuit — came mainly from East Anglia.\textsuperscript{233} These two supply chains were presumably easier to articulate from London. When tenders for main contracts seemed to be open to Cork agents, as in 1775 and again in 1782, several local merchants did lobby (unsuccessfully) for them.\textsuperscript{234} The ending of the war ushered in a period of commercial difficulty that culminated in the collapse of Warrens, the leading banking house, in the autumn of 1784, a situation which suggests a high degree of local involvement in war trading in various forms; as one post-mortem put it, ‘many ... unfortunately speculated rather too deeply in the provisions trade’.\textsuperscript{235}

As in earlier wars official demand had not been confined to that from Britain. It was the efforts of other would-be combatant states to obtain provisions that had first led to the imposition of embargoes, which were more successful in obstructing such supplies than in preventing the flow of provisions to the French Caribbean; by a combination of false

\textsuperscript{232}General account of purchases by F. Baring ... (P.R.O. T/1/585, ff. 205-6); Baker, Government and contractors, p. 144.


\textsuperscript{234}Baker, Government and contractors, pp. 79, 136.

\textsuperscript{235}Belfast Newsletter, 3-6 Aug. 1784.
declarations, framed captures by French privateers and the use of Dutch, Danish or other neutrals' shipping, Cork merchants continued to serve the non-British Caribbean markets, if somewhat irregularly, in the Austrian Succession and Seven Years wars and in the later years of the American war. However peace-time orders for the French and Spanish forces, particularly in the lead-up to war, were considerable; they were handled by those merchants regularly dealing with those French or Dutch houses active in Atlantic trading. The denial of such supplies to the French navy in the late 'seventies was regarded as being responsible for high naval mortality; in 1780 supplies were obtained via the Dutch port of Campvere: 'the French navy ... will at any expense or hazard, get Cork beef. They cannot do without it.'

236. Cf. Edmund Spenser, near Charleville to Francis Price, 4 March 1744/5, Puleston MSS (N.L.W. MS 3,580C [N.L.I. Mic. p3,263]); Duke of Newcastle to Lords Justices of Ireland, 8 Feb. 1744/5, H. Bingham, Bordeaux to [? John Grainger], 13 July 1745, Transcripts of S.P. Ire. 407/2,406, 407/2484 (P.R.O.N.I. T1,060/1); petition of Cork merchants Oct. 1758 (P.R.O. S.P./63/415/375); Henry Heard, Cork to Charles O'Hara, 11 March 1778, O'Hara MSS (P.R.O.N.I. T2,812/17/3); [? Richard Heron] to [Earl of Shannon], [c. Jan. 1780], Nicholas Lysaght, Cork to Shannon, 1 January 1780, Shannon MSS (P.R.O.N.I. D2,707/A/2/2/67, 68); Reuben Harvey, Cork to the Lords of the Treasury, [c. 1] Jan. 1782 (P.R.O. T/1/576 f.393); Pares, War and trade, pp. 309, 429-30; Cullen, Economic history of Ireland, pp. 57-8. Much of the genuine anger over the embargo in the early years of the American war arose from the fear that because supplies to the French islands were being cut off for a prolonged period, trade in 'French beef' would be lost for good to Holstein and the Danes; there were rumours of expert salters having emigrated to the Continent to assist at Rochfort and Bremen: cf. David Melville, Bow St. (Dublin) to Charles O'Hara, 6 March 1778; Heard to O'Hara, 11 March 1778; Thomas Mark, Limerick to O'Hara, 13 March 1778; Stephen Roche, Limerick to O'Hara, 13 March 1778; Connell to O'Hara, 16 March 1778, O'Hara MSS (P.R.O.N.I. T2,812/17/1,3,5,7,8).

237. Lysaght to Shannon, 1 January 1780 (loc. cit.).
'Official' demand could therefore take several forms, and the changing place of war in the local economy was not just a consequence of the rise of substitute markets in wartime, i.e. from the British navy; in fact specific victualling requirements were of themselves never as large as contemporaries - and historians - have made out. However with associated contracts, indirect demand from other belligerents and the increased naval protection against privateers that a more comprehensive convoy offered, the economic implications of war were greatly altered. The prominence of Cork as an official supply centre resulted from a mix of factors, naval logistics, the capacity of its merchants to organize all provision requirements and the strength of the region's political friends in London and Dublin. In the Revolutionary and Napoleonic wars, the pattern was slightly different: Cork no longer held the monopoly, and the Irish Victualling Office had largely superceded the London contractors in the organization and financing of supplies. Yet a much larger proportion of provisions were purchased on official account at Cork than in previous wars; the general export trade in beef had declined dramatically since the 1770s and furthermore, dry provisions, beer and spirits were also purchased locally in large quantities. Another reason was that in the 1790s and after, the very heavy investment in naval fortification and depots, army barracks and ancillary military facilities, had the effect of extending the official demand for foodstuffs. Cork still remained the major transshipment point and victualling centre throughout the wars. And by their long duration, a degree of specialization occurred among contractors, some

238. The estimate of Cork's victualling trade by O'Connor mistakenly includes all English dry provisions and miscellaneous items shipped across the Channel: O'Connor, 'Embargo on Irish provisions', 11.
concentrating on pork supplies, others on flour or drink. In earlier wars, the largest merchant houses usually handled much of the contracting, but in the French wars at the end of the century, the official suppliers were the largest provisions houses because they were contractors: the rise of John Anderson and Daniel Callaghan is only explicable in terms of their war trading.

* * *

Cork merchants can thus be seen to have been selectively active in the export trades, profiting in the short run but in general only reacting to external changes. The shipping owned by the port is some measure of this: in 1678 there were twenty-seven larger vessels of about forty-seven tons on average, and seventeen much smaller craft (a larger number of ships but a smaller tonnage than Youghal). More than a century later

<table>
<thead>
<tr>
<th>TABLE 6:vi</th>
<th>Cork ship ownership</th>
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<tbody>
<tr>
<td>No. of vessels</td>
<td>Tonnage</td>
</tr>
<tr>
<td>1678</td>
<td>41</td>
</tr>
<tr>
<td>1685</td>
<td>50</td>
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<tr>
<td>1776</td>
<td>70 to 80</td>
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<tr>
<td>1791/2</td>
<td>123</td>
</tr>
<tr>
<td>1797/8</td>
<td>65</td>
</tr>
<tr>
<td>1812/3</td>
<td>86</td>
</tr>
</tbody>
</table>

Youghal, Cork and Kinsale only

Sources: Smith, Cork, 4th ed. (1892-4), i, p. 121; 'Sir Richard Cox's description of ... Cork, c. 1685', 357; Young, Tour, ii, p. 66; C. Moreau, The past and present statistical state of Ireland ... (London, 1827), p. 20.


when regular ship registration began, the tonnage was only eight times as large, over a period when the volume of goods in coastal and foreign shipping had increased substantially more than this. If Young's estimate of 1776 was near the mark, half the growth—in terms of vessels—occurred in the fifteen years before 1791/2. Even in the 1790s this stock of shipping was of small tonnage; the average size of the fifty-five Cork ships in 1796 engaged in 'foreign' trade can hardly have been as much as fifty tons.242 The comparatively large measure of shipping capacity registered in other ports of the region in the 1790s was a recent phenomenon, a result of the rise of coastal and English trading in low-value commodities.

The history of locally sponsored privateering ventures in wartime provides confirmation of the modest extent of local shipping resources. In every major war of the century a number of Cork vessels received letters of marque authorizing them to engage with and make seizures of enemy shipping, but as Prof. Cullen has argued, this need only be interpreted as a defensive action by commercial ship-owners; letters of marque provide more an indication of the existence of larger commercial vessels in a port than of aggressive intentions.243 And while the number of Cork ships receiving letters was considerable by Irish standards—ten in the Spanish Succession war, four between 1744 and 1748, twelve in the Seven Years war, fifteen during the American war, and five between 1793 and 1799—it was insignificant in comparable international terms.244 The only certain fitting out of privateers in Cork occurred

242. Account of ships and vessels, 1796 (P.R.O. T/64/182).
244. Ibid. p. 478.
in the 1740s and 1756-8; at the latter time alone, when as many as ten of the Cork ships receiving letters may have been cruising for prizes, was there major local investment in this form of 'risk'. The major personality in that period, Paul Maylor, principal clerk of the leading city merchant, banking and contracting house of Lawton, Carleton and Feray, was involved in fitting out up to eight of the ships, and several of these brought in prizes. But whatever Maylor's short-term successes as an adventurer, he got into financial difficulties which culminated in bankruptcy and his abscondment in 1760; the affair, which bruised his creditors in the city, must have helped to discredit this type of venture thereafter.

Cork's exposure to the attentions of French privateers remained an endemic problem in wartime. The security provided by convoys was greatest for those in transatlantic trade, least for those trading with Europe where Cork merchants had most at stake. In the later years of the American war losses were heavy all along the southern coast, affecting both Cork and Waterford severely. In the first three years of the Revolutionary wars, sixteen Cork vessels were captured by the French. (This cannot completely explain the dramatic fall in

245. Ibid. pp. 478-80. Ships in which Maylor was involved which brought in prizes included the Anson, Cavendish and City of Cork; one prize taken by the latter was rumoured to be worth £30,000 (Pue's Occurrences, 7-11 Sept. 1756, 19-23 July 1757; 27-31 Dec. 1757). Against this good fortune, two others - the Peter and Paul and the Cavendish were apparently themselves captured (P.O., 20-24 Sept. 1757) and there was a mutiny on the City of Cork (P.O. 11-15 July 1758).


248. Account of ships and vessels, 1796.
Cork shipping in the 1790s; some owners presumably resorted to re-registration at neutral ports, as was the old practice on the outbreak of war. The stagnation of Cork-registered shipping lasted however well beyond the period when French privateers were a threat; there was no recovery in tonnage even after 1814. Such a trend points to the enhanced importance of trade with Britain and of British shipping.

In the import trades, the degree of local passivity was distinctly greater than in the export ones. This can be seen both in the degree to which goods were landed and factored on external account, and in the relatively small share of national imports handled by Cork. It would seem that the vast majority of the native goods of Britain and Holland, cloth, hops, beer, metal goods as well as 'groceries' and colonial re-exports were consigned to Cork merchants for them to sell to drapers, brewers, ironmongers, grocers, innkeepers and others in the retail trade, either 'parcel by parcel' or by auction. The customs regulation whereby wholesale merchants paid duties on a slightly lower scale helped to retain the distinction between them and retailers. The most important imports on local account would appear to have been salt and wine, the products of France and Iberia, whither exports on domestic account were also greatest. As for colonial goods, tobacco and sugar from the English Caribbean could not be directly imported after 1685 although Brazilian sugar, if imported from Portugal, was permitted until 1764; however for

249. Moreau, Past and present statistical state of Ireland, p. 20.

250. Cf. Revenue Commissioners minutes, 22 Oct. 1764 (P.R.O. Customs/1/84, f.3).
reasons that are unclear, there is no record of significant sugar imports from that direction. Indeed sugar imports from France, permitted up to 1733, were more important, forming in 1724/5 over three-fifths of unrefined sugar imports (see Append. table xvii). The bulk of tobacco, sugar, tea and India goods can be presumed to have come in via England on English account, although those Cork-based ships that crossed the Atlantic presumably shipped back some colonial goods for the home market (going via Milford Haven or other British port of convenience). After 1731 unenumerated colonial goods - such as rum, flax-seed, flour, barrel staves - could be directly imported, and while direct importation became the norm for several of these, there is little evidence that they were coming in on local account. And in spite of the fact that nearly 85% of the 412,745 gallons brought in annually to the city between 1772/3 and 1775/6 was being landed direct from America, even a rich merchant like Hare admitted that in the previous ten years he had not imported any rum on his own account.

In terms of its share of national imports Cork as a regional centre had of course a higher ratio of imports to total trade (both in value and volume) than most ports, but in the course of the century its share was eroded. From higher levels in the earlier part of the century, in the 1770s it had between about 12% and 15% of the national wine and hops imports, slightly more of bulk timber imports and rather less of (licit) tobacco imports. The relative decline was most pronounced in the case of sugar (see Append. table xvii); with active local sugar-houses, it had

held over a quarter of national raw sugar imports between the 1680s and the early 1720s, at which time Dublin far outpaced it; the proximity of the Bristol refineries may have helped to undermine local production. At its nadir in 1753/4 the city's import of raw sugar was a mere 2.1% of the national total, while in the same year the city accounted for 84% of the country's modest refined sugar imports. Sugar-baking expanded again in absolute terms from the mid-1750s and by the 1770s there were three in the city. Nevertheless this growth occurred at a period of general national expansion.

The existence and elaboration of the Navigation Acts in the earlier part of the century had obviously influenced the development of the import trades profoundly: the passivity of local merchants and the weakening of a provincial centre such as Cork can certainly be related to the 'commercial restraints'. It has been suggested that, had Cork enjoyed the right to import tobacco, it would in all probability have established a re-export trade to the Continent to rival Glasgow. However to have done so Cork would have required such access at the formative stages of the colonial trade, for when 'free trade' was obtained in 1780, the impact on the organization of Cork imports was limited. Tobacco and sugar were indeed imported directly from the American and the Caribbean - up to 99.8% of Cork's tobacco in 1783/4 came direct - but after early enthusiasm, direct imports in both commodities fluctuated around 50% of the total. Cork's share of national imports in these commodities rose somewhat, approaching 15%. But apart from the lateness of Cork's direct access to these commodities, the end of the British monopoly over the

252. Copy, [Hare] to Alex. Thomson and son, 29 Oct. 1771, Hare letterbook, p. 167.

tobacco trade and the already declining importance of the Caribbean in the city's export trade meant that Cork's performance in these trades in the 1780s and 1790s was no test of what might have been gained at a much earlier date; the enterprises of the 1680s are perhaps more relevant evidence. Certainly some of the directly imported colonial goods of the 1780s came on local account, but the profitability of such ventures was not boasted of, indeed rather the reverse, for as Thomas Hewitt warned a Barbadoes correspondent in 1790: 'Our people here say they have been so cut up in their adventures to the W. Indies that they are fairly sick of the trade ... for my own part I have from time to time lost very considerable [sic] by adventures to the different islands ...'.

Change in local demand at this time, a decline in the consumption of rum and of sugar consequent on excise innovations, and an expansion of native distilling and brewing, were hardly balanced by the growth in demand for cotton in the region; thus there was inadequate freight opportunities from the islands. Direct imports nevertheless expanded in the following two decades, but most of these were for re-export. The further adjustment of the Navigation acts in 1793 allowing the re-export of colonial goods from Ireland to Britain seems, in the context of war, to have encouraged such a re-export from Cork, but one almost exclusively on external commissions.

Thus the high sugar imports after 1800 (see Append. table xvii) disguise the fact that shortly after the turn of the century sugar refining in the port largely, if not completely disappeared.


A verdict on the degree to which the Cork export merchant community were in themselves trade creators, exploiting what opportunities they had in domestic and international markets, cannot be made without some reference to the composition of that body, to two problems in particular: the degree to which there was discontinuity and turnover of merchant houses, and the extent to which penal legislation against Catholics affected, for good or ill, the city's commerce.

A significant proportion of the merchants in most trading cities of eighteenth-century Atlantic Europe were transient; furthermore, a pattern of protean partnerships was the norm. However, a high degree of flux was probably more the appearance than the reality in most merchant communities. But even allowing for this, the arrival and disappearance of major families in the external trade of Cork city over two to three generations were striking. Without extensive 'reconstitution', this is difficult to demonstrate quantitatively, but one indicator is a comparison of the signatories of commercial petitions to the government with the first comprehensive trade directory of the city in 1787; one such petition (against an embargo) in 1744 was signed by sixty merchants or merchant partnerships; only about a quarter of the surnames appear as merchants or in closely related occupations in the 1787 directory. Of eighty-two signatories to a petition (against privateers) in 1758, only a third of the surnames appear three decades later. And fully two-fifths of the names in the 1758 petition were unrepresented in the city in any profession or occupation in 1787. These findings alone would appear to

258. Petition of Cork merchants, 8 March 1743/4 (P.R.O. S.P./63/406/120); Lucas, Cork Directory.

justify the observation of de Montbret in 1790 that the city 'resembles a colony where men go to make money but where they would have no desire to live out their lives'. 260 If indeed there was a high turnover of export houses in the city, this could be explained in several ways: a large element of foreign merchants, residing in the city for a few years, and not consolidating their presence by land or industrial investment; easy access to apprenticeships in merchant houses for those from propertied families in the region, who with a fortune made, ploughed it back into land, or at least retired out of trade; or a tendency for those in processing industries, dealers with the country and shopkeepers, to graduate to the rank of exporter and then, with a measure of wealth and gentle status acquired, to move out of trade.

Some evidence can be found for all of these. The first was probably least important, for although immigration by those with mercantile backgrounds was significant, most came on a permanent basis to the region, if not to the city. Probably a majority of the Corporation and leading traders of the late seventeenth century were themselves in this category, men who had come over from England during the Commonwealth and who filled the vacuum left after the expulsion in 1644 of Old English patrician families. Many of the new traders had both landed and city interests from the beginning. After that time the inflow of English settler/merchants was unimportant, although through marriage connections and encouragement from local co-religionists, notably Quakers, England was still a source of recruitment. 261 In the 1690s a small number of Huguenot families settled

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in the city; the policy of the Corporation to encourage foreign Protestants
to settle and become freemen (a policy not of course unique to Cork) pre-
sumably helped to draw such families as the Lavits, Carrés, Denrochs,
Perdriaus, Delahoids, and Besnards, all of whom were major traders in
some capacity for at least two generations; they integrated fairly quickly
into Protestant society. The presence of other nationalities in the trade
of the city was insignificant; the only other notable immigration was to-
wards the end of the century with the appearance of a number of Scots, the
most successful of whom were Samuel McCall and John Anderson. One visitor
in 1797 was led to believe that the city's merchants were 'nearly all
foreigners, Scotch for the most part, and in ... ten years are able some-
times to make large fortunes'. Over the century many merchants came
from other regions in Ireland, for example Henry Sadleir from Tipperary,
the Lynches and Joyces from Galway. Such migrants, whether foreign or
native, who prospered in the city generally did so more as a consequence
of their own skills than of their wealth prior to arrival.

The entry of the younger sons of landed families into trade was a more
important source of recruitment. The portions that it had become traditional
to settle on male children not in line for any landed inheritance provided
the fees for apprenticeship and the initial working capital. At mid-
century about £200 was the expected fee for apprenticeship to an export
house and several hundred pounds was regarded as the minimum to enter
trade with. But personal connections - through marriage, education and

262. Coquebert de Montbret (B.N., n.a. MSS 20,099, f.112); Caulfield, Cork,
p. 274.

263. Delatocnaye, A Frenchman's walk through Ireland 1796-7, (Belfast,

264. John Purcell, Templemurry, 2 Dec. 1748, Egmont MSS (B.L. Add. MS
47,013* [N.L.I. Mic. p4,680]); letter from 'Honestus' in Freeman's
Journal, 3 June 1769; letter from 'A merchant, Cork' in Freeman's
Journal, 29 Nov. 1770.
recreational contact - both with other traders and with the families of substance in the country, were probably more important factors in developing the symbiosis between land and foreign trade than possession of initial capital. The rarity of multi-family partnerships engaged in foreign trade is an indication of the small capital requirements necessary for participation in such activity. The commission orientation of trade was particularly attractive to those seeking a career with a relatively assured income, where reputation, not personal wealth, was the means of advancement. Tuckey recognized this in 1837, looking back on the previous century: 'as success appeared pretty certain to those possessed of adequate means, country gentlemen were led to apprentice their younger sons to merchants. Hence most of the wealth of Cork ... was in the hands of families of standing and education ...'. This of course implied a preference for low-risk ventures, and indeed contemporaries had on occasions complained of the unadventurous nature of most merchants, their unwillingness to advance risk capital outside the provisions trade. The importance of rural recruitment is confirmed by the relatively few instances before the 1780s of internal upward mobility in the city. Such progression was not unknown, but before the final decades of the century was almost certainly the least important of the three possible sources of new personnel.

265. Partnerships were growing however: only two were recorded in the 1758 petition (see above fn. 259), whereas of the 121 merchant houses recorded by Lucas in 1787, twenty-two were given as partnerships.

266. F. H. Tuckey, The county and city of Cork remembrancer ... (Cork, 1837), p. cii.

267. Henry Sadleir and co., Cork to John Foster, 28 Jan. 1785, Foster MSS (P.R.O.N.I. D562/8861); 'Hibernicus', The Irish manufacturer's plea in a letter from a gentleman of the county, to a merchant of the city of Cork (Cork, 1732/3), p. 4.
The concomitant of ease of entry from the land, was ease of exit. However the exodus was not primarily back to the ranks of the rural landed class, for although there was a continuous ploughing of urban savings into fee-farm and particularly leasehold interests, the character of rural land ownership during the century was not over-influenced by demand from the city. In practice families retired from trade into a variety of areas - the professions (notably law), urban land development and politics. Admittedly this cannot wholly account for the fate of the two-fifths of the 1758 signatories missing in 1787: a few of the former were probably temporary residents in Cork (perhaps only for the duration of the war); other families are known to have been still living in the immediate neighbourhood of the city in 1787; presumably a number of families simply died out.

There was no obvious threshold point of capital accumulation at which merchants retired; Young, referring to the whole country, believed 'commercial people [quit] ... when they have made from five to ten thousand pounds to become gentlemen ... at the very moment they are best able to command success'; Townsend thought it 'a few thousand'. But one local writer in 1767 believed there were many in the city's richer families worth £40,000, and it seems to have been generally believed that the wealth of the city's top merchants was comparable to that of Dublin merchants; indeed it was claimed in 1786 that there were twenty or thirty

268. See above pp. 70-4.
269. Young, Tour, ii, append. p. 191.
men in the city as 'solid' as in any city in the empire. Without probate inventories, confirmation of such beliefs is impossible. However the scale of marriage portions is suggestive: a sample of those settled on leading merchants' daughters at mid-century fell into the £3,000-£5,000 range, i.e. similar to what second-rank rural landowners were settling. The assets of William Delahoyde (sic) who absconded in 1739, included two ships and a canvas manufactory; the total was valued at £13,198, plus an estate of £114 p.a., in all therefore about £15,500. Paul Maylor at his failure in 1760 had similar assets. Of the richest dynasties, the Lavits were already noted for their wealth by the 1740s, and when Nathaniel Lavit died in 1770, it was said he was worth £100,000. Richard Hare must have been in the same league: in 1771 he had landed property worth about £40,000 (apparently purchased by himself); in the following decade he spent about £50,000 on land purchases from the Earl of Kerry alone. In a different tradition Daniel Callaghan was believed (retrospectively) to


273. E.g. a niece of Richard Bradshaw, £5,000: Cork Journal, 2 March 1758; a daughter of Hugh Lawton, £3,000: C.J., 23 Aug. 1957; a daughter of George Duncombe, £3,000; C.E.P., 15 May 1760; a daughter of Joseph Gray, £2,000: C.J., 14 May 1761; a daughter of Francis Gould, £3,000; C.E.P., 20 June 1763; a daughter of Phineas Bury, £4,000: C.E.P., 16 March 1767; a daughter of Philip Stacpoole, £2,000: Hibernian Chronicle, 30 Aug. 1770.

274. J.H.C.I. IV, cxxvii.

275. O'Kelly, Banks of Munster, p. 32.

276. Coquebert de Montbret (B.N. n.a. MSS 20,099, ff. 105, 110); [Chetwood], Tour through Ireland, p. 55; W. Clare, 'A brief directory of the city of Cork, 1769-1770', in Irish Genealogist, i (1937-42), 258.

277. See above p. 90. His landed income of £2,000 p.a. was presumably worth about twenty years' purchase.
have been worth £250,000 at his peak, presumably in the later years of the Napoleonic wars. However one indication of the rarity of huge mercantile fortunes was the small number of founder-subscribers to the Bank of Ireland among Cork merchants in 1783; Richard Hare was the largest subscriber locally at £5,000.

The development of banking in Cork itself gives further insight into merchant structure. By 1800 there had been some eleven so-called banks at different stages during the century. From the 1720s there were never less than two at any one time, never more than three. Prior to the 1756 legislation preventing those engaged in foreign trade from describing themselves as bankers, banking had been an attractive form of diversification for the largest commission merchants. Their major activities were the negotiating and resale of bills of exchange drawn on London by other export merchants, in particular to estate agents who had rents to remit to absentees. On discounting or otherwise purchasing bills bankers, rather than paying specie, issued notes payable to bearer, and in so doing they helped to relieve the shortage of coin, an endemic problem in the region at least until the revaluation of 1737. Those merchants, buying in the bills of others in a position to draw, were being loosely described as bankers as


279. Others included Pierceys and Waggetts (£4,000) and John Digby (£3,000). Amos Strettle (£3,000) may have been a relative of Thomas Strettle, Cork merchant: F. G. Hall, The Bank of Ireland 1783-1946 (Dublin, 1949), pp. 508-10.

280. See O'Kelly, Banks of Munster, pp. 30-79. This work omits any mention of the banks of Holland Goddard (who failed in 1729) or that of Harper and Armstead (with early additional partners Mitchell and Armstrong). It also places the beginning of the Falkiner and Mills bank at 'c. 1760', whereas Caleb Falkiner who died in 1746 was described then as both merchant and banker (Pue's Occurrences, 1 Feb. 1746).
early as 1708, at which time the most important house was that of the Hoare brothers. Their position as official victualling contractors which gave them cause to draw large bills on London, made it easy for them to accommodate the country demand for bills. The Hoares survived (with several changes in the partnership) for two generations until about 1740; the house continued in general trading throughout. In the case of the other major early banking partnership, Harper and Armstead, which operated for over thirty years until 1760, its founder and senior partner, John Harper, was associated with it throughout. It lapsed when he 'retired to live in the country'. Until at least the 1740s the partnership were primarily concerned in the Atlantic commission trade, and were also trading to Portugal on their own account — at a time when they were handling up to £60,000 p.a. in rent remittances on their bills; their notes payable to bearer were also circulating widely by that time. In the later part

281. William Taylor, Burton to Sir John Perceval, 2 Dec. 1708; W. Turner, Cork to Perceval, 7 Dec. 1708, Egmont MSS (B.L. Add. MS 46,978*, pp. 198, 205 [N.I. Mic. p4,674]). The term 'banker' was not current in the 1680s.


283. John Armstead, Cork to Sir Thomas Heathcote, 13 May 1760, Heathcote MSS (P.R.O.N.I. T3091/198).


of their career their main rivals were Lawton and Carleton (with a variety of additional partners), who were also merchants first - being the most important official contractors in the 1740s - and bankers second. The parliamentary legislation of 1756 dividing these activities (in the wake of the major Dublin bank failures) had little immediate impact: in 1760 Carleton, Lawton and Feray (as they were then) were still issuing bearer notes while remaining active in overseas trade - until the Maylor scandal that year. After it, they continued both as merchants and regular remitters for the country (including the Devonshire rents) - avoiding the label of 'bankers' - until their bankruptcy in 1774. It seems unlikely that they issued any bearer notes after 1760, so that they were in a similar position to other major merchants like Richard Hare - who sought to avoid passing his bills to recognized bankers in order to get a higher profit by selling them privately to remitters. However to compete with the banks such merchants had to have reputations as sound as bankers', and it helped if they were also able to draw bills for round sums.

The new banking partnerships that flourished in the second half of the century inherited the functions of the first banks, bill discounting

287. A presumably related banking partnership of J. Lawton, W. Austen and R. Lawton was broken up explicitly as a result of the act: Cork Journal, 30 June 1757.


and remitting, but they were different in two related ways: their major partners were drawn from either the region's landed families or the city's professional ones; secondly, they tended to be more formalized and have a stronger legal continuity, in spite of partnership changes. Falkiner and Mills' bank was a mixture of old and new; it evolved out of the trading activities of Caleb Falkiner (who may also have been local agent for the Dublin bank of Burton and Falkiner, in which his brother was a partner). After 1756 the partnership remained explicitly a banking one, but during the following half century of its existence, nearly all its new partners had a landed or professional background.  

The Tonson/Warren bank, launched in 1768, had over its sixteen-year history, the senior representative of five of the largest resident landed families in the region, and only one of its eight partners, William Cuthbert the cashier, had mercantile connections. Up to the time of its spectacular bankruptcy in 1784 it was the richest bank in the city's history. Of the other major banks that were in existence before 1800, Roberts' (or Leslie's), set up in 1789, had as its original partners two of landed origin, a barrister, an attorney and a distiller, while Pike's, established about 1770 had family, if not more formal links with the old Hoare firm. It was only after the

291. O'Kelly, Banks of Munster, pp. 60-1.

292. Thomas Forrest, Cork to John Hely Hutchinson, 2 Oct. 1784, Donoughmore MSS C/6/2; O'Kelly, Banks of Munster, pp. 52-3.

293. Hibernian Chronicle, 13 April 1789; Lucas' Directory; O'Kelly, Banks of Munster, pp. 77-9.

294. O'Kelly, Banks of Munster, p. 40. If merchants were no longer diversifying into banking, it was not because of a new interest in other financial activities. There were several abortive attempts to establish local insurance companies (underwriting both marine and general risks), the earliest being in 1747. The initiative for these came apparently not from merchants themselves, but from local agents of English insurance companies: Faulkner's Dublin Journal, 24 Oct. 1747; Cork Journal, 24 Feb. 1755; Hibernian Chronicle, 30 June 1791; C.E.P. 14 June 1792; Cullen, Anglo-Irish trade, p. 138. The company set up in 1792 by Austin Shinckwin lasted for at least six years (e.g. see advertisement in C.E.P., 27 Aug. 1798).
'Restrictions act' of 1797, ending specie payments by the Bank of Ireland, that merchant involvement in banking was again noticeable: eight banks were registered in the four years after 1799 - two major ones in the city, and minor ones in Youghal, Fermoy, Mallow, Charleville and two in Dungarvan - and nearly all were set up by merchants or ex-merchants. This generation of banks, many of which were short-lived, was quite different in character from its predecessors, the banks' activities being geared more to internal trade, and hence the impact of their credit creation was felt more deeply in the region. Even in the case of the city banks the external bill trade was of reduced importance. Some indication of the rising scale of paper put into circulation at this time comes from the notes and other debts outstanding of those city banks in financial difficulty; in 1784 Warren's debts were £247,328, while those of Roberts in 1793 (at a time when they experienced severe liquidity problems) were £126,169, three-fifths in notes outstanding. The Pikes' bank, before contracting operations in 1796-7, were reported to have had £200,000 in circulation, while Cotter's (ex Falkiner's) presumably had considerably more than that when they failed in 1809 with debts of £447,000. Estimates between 1804 and 1810 put the total Cork note circulation at between £600,000 and £1 million.

As already noted city banks, even in the 1720s, had been making seasonal advances to other merchants, to butchers and probably to butter buyers. This they had been able to do by their command of surplus funds


in spring and summer, a situation which arose in two ways. They had been the repositories for 'dead money' at a fairly early stage, placed with them temporarily by merchants between seasons, or for short-term safekeeping by trustees, lawyers and miscellaneous rentiers, when they were seeking out attractive loans or mortgages. By the 1760s clients of Falkiner's could maintain deposit accounts at interest as well as 'accounts current', although bankers cannot have granted deposit accounts to all and sundry. Probably a more important factor in bankers' ability to make short-term advances lay in the seasonal pattern of exchange: every autumn from the beginning of the slaughtering season, the level of exchange on London fell appreciably as commission merchants sought to draw on the London correspondents of their foreign customers. And for a number of months following, a significant differential between the rates of exchange on London at Cork and at Dublin usually appeared - in the first half of the century of up to 2%. It was therefore in the interest of landowners resident in England to have their rents directed via Cork and remitted thence during the last months of the year, unless the inland costs of so doing were greater than the benefit, or the demands in England for a remittance too urgent. Rents collected over the year would be channelled to Cork as opportunity allowed, both from within and outside the region, and their remittance delayed until exchange fell. The evidence for this inflow being somewhat oblique, it is difficult to judge its importance, but the general willingness of bankers to provide seasonal credit from an early stage


299. See Riggs Falkiner, Cork to the Earl of Shannon, Shannon MSS, 3 Nov. 1767, Shannon MSS (P.R.O.N.I. D2707/A/2/2/2).
suggests it was considerable. 300

With discretion in the allocation of short-term advances, bankers were clearly in a position of considerable power. Riggs Falkiner's decision to advance the young Daniel Callaghan £500 credit was in retrospect seen as the start of the latter's career; (a year later the advance was said to have been £10,000). The Warrens' capacity to lend helped to bring them political success in the 1783 parliamentary election (and to edge them towards bankruptcy). 301 And it can have been no coincidence that in the 1760s - before the intrusion of the gentlemen bankers - the two de facto bankers were also the leaders of political faction in the city, Francis Carleton an ally of John Hely-Hutchinson, and Riggs Falkiner, friend and creditor of the Earl of Shannon, who was brought in as an M.P. for one of Shannon's boroughs in 1769. 302

In eighteenth-century Cork there was no Catholic bankers; the first was to be that of the Roche brothers in 1800, one of whom was a returned emigré from Bordeaux. 303 Their absence is hardly surprising. The older view of historians that the land confiscations and subsequent penal legislation greatly strengthened the Catholic presence in trade, and that the subsequent rise of a wealthy Catholic merchant class in the course of the


302. Riggs Falkiner to Shannon, 23 Oct., 3 Nov. 1767, Shannon MSS (P.R.O.N.I. D2707/A/2/2/1, 2/); [copy], John Hely-Hutchinson to [?], Cork, c. 1770, Donoughmore MSS C/5/18.

303. R. Hayes, Old Irish links with France (Dublin 1940), p. 102n.; O'Kelly Banks of Munster, pp. 84-7. There had however been rumours of a specifically Catholic bank after the collapse of Warrens': Richard Brook Supple, Killeagh to Richard Supple, 29 Sept. 1784, Brook MSS (P.R.O.N.I. T2975).
eighteenth century occurred at the expense of Protestant traders is not tenable in relation to Cork, at least not for the penal period. The rigid exclusion by the Protestant Corporation of Catholic merchants from any form of municipal privilege was a consequence not of the economic threat the latter posed but a discrimination based on the political assumption that Catholicism was indistinguishable from Jacobitism. This could be taken to unreal extremes; in 1697 Protestants were forbidden by the Corporation from taking Catholic apprentices; in 1709 there was even support for an attempt to exclude Catholics from any participation whatsoever in foreign trade. 304 Later assertions by pamphleteers of the growth of Catholic traders were exaggerated; the new importance of exports to France in the second quarter of the century, which benefitted (among others) Catholic merchants with kinship links in the French ports, might have appeared to threaten Protestant dominance, as 'Alexander the coppersmith' sought to argue in 1737. 305 However it is quite clear that throughout the period Cork's mercantile wealth remained predominantly Protestant, even if behind the export houses the consolidation of Catholic wealth was indeed a reality; their participation in the processing trades and in retailing was considerable and, significantly, 'Alexander the coppersmith's' real jibe at new Catholic wealth was not at merchants, but at the dealers and shopkeepers of Mallow lane. In an age of expansion the city of course contained an increasing number of prosperous Catholics; in relative terms however their share of the city's wealth only began to increase towards the end of the period.

There were nonetheless always a number of Catholic export houses active in the city, mainly recruited from descendants of the old burgher

304. Caulfield, Cork, pp. 260, 335.
families who had owned much of the city and dominated trade and society before 1641. Of the nine family groups with extensive property holdings in the city in 1641 - the Goulds, Roches, Terrys, Meads, Coppingers, Waters, Lombards and Morroghs - all but one had representatives, in name at least, trading as merchants in 1787. The leading Catholic merchants in the city before the latter date were mainly connected with this group which married within themselves, with their connections overseas or with the Catholic mercantile families of Waterford and Limerick. Partnerships with Protestant merchants were almost unknown, and the cohesiveness of these families was not unlike that among the local Quaker community. There was almost certainly a stronger element of continuity in business among both these groups than among most Protestant merchant houses. Exclusion from public participation in the institutions of city government was of course more complete for Catholics than for Quakers, but in practice the restriction on the economic activities of both groups after the early 1700s was minimal. The fact that no outstanding fortune appears to have been amassed in the Catholic community to rival the Quaker Newenhams or the Pikes, despite the element of continuity, was not just a result of the natural diffidence of Catholic families to display their wealth in conspicuous forms. For in several other ports a small number of very wealthy Catholics did emerge such as the Roches in Limerick. The less impressive showing of Catholic merchants in Cork was related to a number of factors, the horizontal mobility between urban and estate Protestant, their more ample numbers than elsewhere, the weakness of the Catholic landed interest in the region after 1700 which deprived urban Catholic enterprise of a source of capital and educated apprentices. And the fact that historically

the links between the old city families and the former Catholic landowners in much of the region were less than intimate did not help. Even families of old English extraction who remained Catholic and retained residual landed property such as the Nagles and various branches of the Fitzgeralds, Barrys and Powers were of very minor importance except as notaries, 'counsellors' and doctors in the city, reflecting perhaps a contempt for what openings were available in 'vile and mechanical professions'.

There were notable exceptions such as the Harrolds and the Rochforts, the latter a Limerick landed family that lost their estates in the mid-seventeenth century; an eldest son, David Rochfort, by marrying into one of the major new Protestant families in Cork city, the Pembrocks, in the 1690s, 'succeeded in acquiring an understanding in trade, and a very ample fortune in consequence of it', thereby establishing the family in the city for several generations.

The diaspora of Catholics to the Continent, to Britain and to the New World, whether as adventurers, merchant apprentices, seminarians, recruits for the Wild geese, or those in pursuit of forms of education unavailable at home, was responsible for a significantly smaller supply of sons of well-to-do Catholics entering urban life at home. Most families of any social pretension had social links with some of the centres of Irish settlement on the Continent. For example of the five daughters of David Rochfort who were married, three were to Irishmen resident abroad (two in Spain, one of Nantes), and such cosmopolitan links were as

true of rural- as of urban-based Catholic families of substance. The largest migration had taken place in the 1650s and 1690s as a consequence of political disasters at home, and the traditions of foreign military service and of professional and clerical education abroad were well established by 1700. Permanent emigration continued on a smaller scale for most of the following century because of both 'push' and 'pull' factors: the uncongenial domestic environment and the reluctance of many of 'good family' to enter the mean openings in trade available, the comparative ease of access to opportunities in commerce and the professions in those cities abroad where Irish communities were already established. Thus Patrick Sarsfield, an Ostend merchant, writing home to a cousin in 1716 explained why he had left Cork: 'I have enough to do [here] which is better than be idling there since my good father would not put me on to such footing by which ... I could make shift to live, but ... I had no great inclinations to stay in the cursed city of Cork for several reasons chiefly want of the liberty of conscience and also if [I] did hire a small shop in Mallow lane to buy and sell butter ... I could not clear my expenses unless [I] did as the most part of my neighbours did, which will never do, let my fall be what the Almighty pleases ...'.

The main overseas Catholic settlements associated with the region were becoming defined by the early eighteenth century: Ostend/Bruges,

310. Patrick Sarsfield, Ostend to Dominick Sarsfield, 28 May 1716, Sarsfield MSS (N.L.I. Acc. no. 2,930).
Nantes, Bordeaux, Toulouse, Lisbon and Cadiz; (trade, educational and clerical links did not however wholly coincide). However for the size of the city's trade with Europe the proportion of Cork emigrés in the Irish factories was not as large as might be expected; in a 1756 list of Irish non-clerical citizens in Bordeaux, only a quarter gave Cork as their place of origin; furthermore, a third of these were Protestant.  

In the final decades of the century the relative weight of Catholics in Cork civic affairs grew, reflecting the beginnings of a long-run shift.

311. At Ostend/Bruges, apart from the Sarsfields, there were members of the Galwey, Gould, Ronayne and Hennessy families active in trade: copy, [William Hovell] to Stepney and Monteage, 19 Dec. 1684, Hovell letterbook; Patrick Sarsfield, Ostend to Dominick Sarsfield, 22 June 1724, Sarsfield MSS; Maurice Ronayne, [Fetters] to Earl Grandison, 6 Apr. 1729, Villiers Stuart MSS C/6; Pue's Occurrences, 2-4 March 1758 (for note on Charles Hennessy). At Nantes, Andrew Galwey, important in the smuggling trade, was of local extraction: Cullen, 'The smuggling trade in Ireland', 154-5, 164; for other families cf. Hayes, Links with France pp. 62-74. At Bordeaux the most important local Catholic families in commerce were Galweys, Coppingers, MacCarthys and O'Sullivans: Sir Henry Blackall, 'The Galweys of Munster' in J.C.H.A.S. ixxii (1967), 131-3; T. J. Walsh, The Irish Continental college movement (Dublin, 1973), pp. 105-7; Hayes, Links with France pp. 97, 102-4. The Toulouse community was mainly associated with the Irish seminary there (recruiting its students very largely from Cork and Kerry), but it seems to have spilled over into the city's commercial life: A. G. Murphy, 'A note on the Venerable John's Society' (typescript of lecture to the Venerable John's Society, Cork, 1965), p. 2; Walsh, Continental college movement, pp. 122-39. The Irish factory at Lisbon in the 1780s included a 'Gallway', a Power and a Connell: copy of depositions from R. Walpole, Lisbon, 29 Jan. 1785, Bolton MSS (N.L.I. MS 15,872/14). Among local representatives at Cadiz was another 'Gallwey': Account-book of Edward Gallwey, Cadiz, 1753 (in possession of Mr J.A. Gamble, 539 Antrim Rd. Belfast).

312. Cf. L. M. Cullen, 'Merchant communities overseas, the Navigation acts and Irish and Scottish responses' (paper delivered at Scottish/Irish symposium on the comparative economic development of Scotland and Ireland 1600-1900, Sept. 1976).

313. 'Irish residents in Bordeaux, 1756' in Irish Genealogist, iv (1968-73), 598-601.
in the composition of the merchant community. The Committee of Merchants before the end of the 1770s already included a substantial number of Catholic representatives, a fairly radical departure for the city; a Catholic exporter, Patrick O'Conor was president for 1783. After the 1793 Catholic relief act, several Catholics regularly sat on the city Grand Jury, and also from that time the Hely-Hutchinson/Donoughmore faction in the city became identified with the Catholic interest, inaugurating a generation of bitter denominational politics in the city. An examination of the causes of this shift, most pronounced after 1815, lies beyond the scope of this study. It is clear that any explanation would need to take account of several independent factors: the decline of the old general merchant was probably one reason, a result of the increasing Anglo-Irish orientation of trade and the phased introduction of a customs union, when the intermediary became redundant as English importers and exporters bypassed them; a large stock-in-trade was less necessary, and the distinctiveness between dealers and exporters became blurred. Unrelated to this was the expansion of alternative careers for the younger sons of landowners, mainly outside the region. A petition drawn up by Cork corn exporters in 1813 is a pointer to the extent of change even before the end of the wars: judging by the surnames about a third of the thirty-six signatories had been connected with merchant houses in 1787; another two-fifths probably had evolved or diversified out of a wide range of other businesses since 1787; most significantly, at least half and maybe more were members of Catholic families. 314.

An association between the revival of the grain trades and the resurgence of urban centres outside Cork has already been made. But change in the composition of the agricultural surplus was only one factor influencing market structure; an analysis of the organization of the distribution reveals others. Imports and local manufactured goods could be retailed in three ways: from shops in the city, at fairs in the region, or at markets and shops in country towns. The proliferation of shops and retail outlets in Cork was a direct consequence of the concentration of the market in export goods on the city. Just as Mallow lane was the centre of butter dealing with the country, so shops and stores dealing in common country requirements proliferated in that quarter at the expense, it was argued, of the inner city dealer. Attempts to curb the growth of Catholic shops at the beginning of the century on the grounds that non-freemen were not entitled to enter the retail trade can only have helped the concentration of Catholic shops in the suburbs. Such establishments were presumably handling mainly tobacco, salt, some 'groceries' and iron goods. Their growth and prosperity, already striking by the 1730s - 'thatch and sky-light, edified into cant-windows and slate' - was an indication of the growing rural market for a limited range of commodities. With such dealers doubling up as butter buyers, an element of de facto barter was probably common. Butter buyers could also shop for distant suppliers; thus when Maurice O'Connell in Iveragh sent carriers to Cork with butter, he commissioned his dealers to buy sundries from

315. Alexander the coppersmith, Remarks, p. 79.
317. Alexander the coppersmith, Remarks, p. 79.
druggists, drapers, glaziers, grocers and ironmongers. At Killarney, Young noted that the butter 'truckles' to Cork returned with rum and groceries. By contrast there was the more select clientele of the drapers and haberdashers, vintners and silversmiths. Business revolved around social occasions when the country gentry came to town, in particular Assizes time. The slow turnover and irregularity of sales forced importers (whether principals or factors) to give long credit to such dealers, a concession less necessary in the case of the more popular items such as tobacco; in order to keep their custom, credit was extended to the consumer too. These conspicuous city shops were generally praised by outsiders during the century for their stock and appearance, and a measure of their status was the fairly high apprenticeship fee: in 1770 that with a master grocer was assumed to be £100; three or four times that sum was taken to be an adequate stock-in-trade to commence business with, and the kind of fortune the large grocer could amass was estimated at £10-20,000. In 1787 grocers were the largest category in the city's distributive trade, with addresses mainly in the old city area. But even shops in the north suburbs could be the foundation of 'large fortunes'. At the other extreme was the street trade, the 'standings of frieze and other woollens, of bandle cloth and other linens, and of gartering and other small wares' that because of congestion the Corporation attempted to restrict to designated market places.

318. E.g. Jerry McCrohan, Cork to Maurice Conneil, 30 Nov. 1773, 9 June, 6 Oct. 1788; Charles Casey, Cork to O'Connell, 3 Aug. 1793, O'Connell MSS (U.C.D. School of Archives A/12/4; P12/2/A/148, 151, 156).
319. Young, Tour, ii, p. 119.
320. Letter from 'A merchant, Cork' in Freeman's Journal, 29 Nov. 1770.
DISTRIBUTION of FAIRS IDENTIFIABLE
FOR 1735

- Fairs advertised in Watsons Almanack for 1735
- Fairs authorised in patents since c.1600 and apparently discontinued

MILES
0 20
DISTRIBUTION of FAIRS IDENTIFIABLE FOR 1795

Source: Watson Stewart's Almanack, 1795
The city for all its importance did not directly supply the majority of the rural population with the narrow range of necessities that had to be regularly purchased. For much of the century the local fair, usually held either bi-annually or quarterly, was the occasion for purchasing linen (and later cotton), brogues and shoes, simple haberdashery items, timber and wattles, spade handles, truckles and other farming implements. Of course for many the fair was carnival first, a place of trade second; apart from the annual 'pattern' at a holy well it was the one place where even the labourer might be expected to consume alcohol.

The spread of fair sites in the region from about ninety-two in 1735 to about 145 by the 1790s was ostensibly the result of landlord initiatives. However their enthusiasm for new fairs was less because of the expectation that they would favourably influence neighbouring farm prices and land values (as was the motive behind urban foundation) than because of the hope for easy income which would come from the leases of tolls on cattle sold and standings erected, once fairs became established. The initial investment in getting a patent to hold fairs was expensive, and after it was obtained, custom was sought by a variety of incentives. Tolls were not usually imposed for several years, premia were offered for sellers and buyers, horse races with prizes were organized, and entertainments - in one


324. Newenham, *Population of Ireland*, p. 230. For comments on the non-economic character of the fairs at Millstreet and Timoleague respectively, see copy, [Richard Hedges], Ross Castle to Joseph Dawson, 8 June 1714, Hedges MSS (P.R.O. I. M757); Townsend, *Cork*, p. 259.

Such encouragements were designed to entice outside dealers, whether buyers of cattle or vendors of goods, for on their willingness to attend depended the reputation of a fair and its level of business. Some fairs created in the seventeenth century did not survive, most noticeably a number in north Cork (see Map 7). Even creations of the early eighteenth century suffered in the depressed 1740s: 'many of the new fairs ... are entirely dropped, or are not attended with any reasonable profit to the proprietors'. However during the third quarter of the century the expansion of dairying helped to sustain new fairs so that only a handful active in the 1730s were not there in the 1790s. There was seldom opposition to new fairs, although the county sheriff could oppose applications in certain circumstances.

The most noticeable growth of fairs during the century was in remoter districts in Muskerry, west Duhallow and central Kerry (see Maps 6 and 7); some were in association with new towns, or with planned urban expansion,

326. For examples of toll-free fairs: (Kanturk and Newmarket) Berkeley Taylor to Baron Perceval, 5 June 1721; William Taylor, Ballymacow to Viscount Perceval, 16 May 1728, Egmont MSS (B.L. Add. MSS 46,986*, p. 92; 46,993*, p. 74 [N.L.I. Mic. p4,676-7]); (Donovan's Leap) The Medley, 28 April 1738; (Dromirourke, Co. Kerry) Cork Journal, 26 April 1756; (Ballinspittle) C.E.P., 4 March 1767. For offers of entertainment, horse-racing etc.: (Dunmanway) Dublin Gazette, 22-26 March 1709; (Molahiffe), C.J., 21 Aug. 1760; (Trantstown), C.E.P. 27 March 1797. For the offer of a buck-hunt: (at Knocknamariff) C.J., 20 Aug. 1764. For specific encouragement to sellers: (at Blarney) C.J. 21 June 1764.


but as in the more advanced districts, a large number of fairs were held away from towns and villages. South Kerry and Corkaguiny were still almost without any fairs in the 1790s, but those in central Kerry catered for these areas, for about half of all the fairs in the Kerry segment of the region were advertised as lasting for two days, whereas nearly all in Cork and west Waterford were one-day events. With weaker urbanization Kerry's fairs retained their importance as distribution points longer than elsewhere.329

As for the urban centres outside Cork, their increasing importance as distribution centres in the later decades of the century was one facet of their physical growth. Prior to then, 'shops' had by no means been absent, but such shops were not exclusively, perhaps not even primarily, retail outlets for consumer goods; thus the twelve shops that were noted in a 1702 inventory of Macroom330 were more likely alehouses than stores. Probably the business of the small-town 'shopkeeper' before 1750 lay more in the buying of agricultural goods (on city commission or otherwise) than in the scale of wares to the country: Josiah Bateman, a shopkeeper-merchant of Tallow, claimed in 1731 that he had been 'concerned with the merchants of Cork and Youghal for several years', during which time he had laid out over £1,500 p.a. on goods of the country; his warehouses and back houses had been worth £250 and equipment for his children's culing and nailing trades had cost £60; yet his shop goods when inventoried were put at a mere £20.331 Similarly at the new village of Annagh the only pro-

329. For a comment on the absence of shops in Dingle: Beaufort, Travels 1788, ii, p. 21; for a description of goods on sale at Kenmare fair in 1809: Lansdowne, Glanerought p. 120.


pective retailer in 1728 intended to buy butter on commission; he would also 'supply the country with all sorts of groceries such as iron, hops etc.' as well as engage in the tobacco and salt trades. Supplying the latter two commodities was probably the most important country retail activity for the greater part of the century. Both were brought into the country in a form requiring further processing, the tobacco had usually to be pressed and twisted, the salt (generally that coming from England in rock form which was used in ordinary butter making) had to be boiled.

As yarn merchants - those engaged in putting out wool to be combed and spun - were the only capitalized individuals in some centres, these discrete trades were sometimes linked under single management; in Kanturk the Purcells employed, together with their worsted combers and scribblers, tobacco rollers and soap boilers; the assets of Benjamin Hayes, a Dunmanway clothier on his death in 1768, aside from wool and yarn (worth about £125), included a tobacco press with leaf and snuff, as well as moderate quantities of tea, sugar, ironware, linen and woollen cloth, tallow and ninety-seven pairs of men's shoes (in all worth about £77). Tobacco processing remained a widely dispersed activity - in the region over half the presses and over a third of the 'tobacconists' paying excise in 1785 lay outside the greater city area - but salt-boiling appears to


333. E.g. Smith, Cork, i, p. 189.


have become more concentrated on the city and other coastal locations as imported fuel came to be used.\(^{337}\)

Outside of Youghal, Kinsale, Bandon, Mallow and Charleville, retail specialization only seems to have appeared in the last decades of the century. As many as half of the 249 licensed grocers recorded in the region outside the Cork district in 1785\(^{338}\) may have had other primary occupations - from innkeeping to tanning. Even in Bandon, of the thirteen grocers recorded in 1787 eight followed other trades as well (five in textiles and related activities).\(^{339}\) The trend was however towards more specialized and comprehensive retailing. Townsend claimed in 1810 that Clonakilty's shopping facilities had been transformed in twenty-five years, from a situation where there had been few shops and those 'dear and ill furnished', so that 'most articles of common requirement' had had to be purchased in Bandon or Cork, to one where nearly everything was available locally and on reasonable terms.\(^{340}\) One explanation of this trend was that as corn stores, maltings and mills proliferated, a smaller proportion of country producers were being drawn to the city to sell their goods and therefore to make purchases there. But demand was not just being redirected, it was

\(^{337}\) See advertisements for the Dunscombe Marsh salt and lime works: C.J., 8 Dec. 1763; for Courtmacsherry salt - at Cork prices: Hibernian Chronicle, 1 July 1782; for the Youghal salt, lime and brick works, C.E.P. 17 May 1792.


\(^{339}\) Lucas' Directory.

actually expanding in two ways: sustained population growth was increasing the call for fundamental necessities, and aside from this, there was a widening of demand from the majority of farming households where towards the end of the century real income was growing, most noticeably in tillage districts. Urban trends seem to have reflected this, growth being greatest firstly, in areas where rural population was itself probably expanding fastest, and secondly, where tillage farming and the grain trade were boosting farm savings and purchasing power: towns such as Bantry, Skibbereen, Macroom and Millstreet grew rapidly amidst poor hinterlands in the two generations before 1821, while the enlargement of Mallow, Midleton and Clonakilty arose amid relatively prosperous farming communities (whatever the fortunes of labourers).

Apart from industrial development mainly sponsored by landowners (which is discussed in the next chapter), there were two other positive influences affecting the growth of smaller urban centres. One was the rise of embryonic tourism. The earliest instance of a town becoming a centre of seasonal resort was Mallow where the spa-water was sufficiently esteemed as to prompt the erection of an assembly-room near the pump in 1738. But although in following decades there was 'generally a good deal of company there' the lack of adequate accommodation and the unenterprising behaviour of the owners of the town, the Jephsons, meant that few visitors from outside the region were drawn to it before the nineteenth century, although many had thought the potential was always there. Kilgarney in contrast


342. Wight diary, entry for 16 June 1753; Beaufort, Travels 1788, i pp. 81-3; L. W. Dillwyn's tour from Swansea to Killarney, 1809, f. 85 (T.C.D. MS 967); Pue's Occurrences, 15 April 1738; [Thomas Campbell], A philosophical survey of the south of Ireland ... (London, 1777), p. 205; Townsend, Cork, pp. 512-3.
became internationally known for its lake scenery and natural wonders in the course of the second half of the century; the beginnings of its popularity coincided with the efforts of the fourth viscount Kenmare to extend the town in the 1750s.\textsuperscript{343} His intentions were to develop it primarily as a manufacturing town, but innkeepers seem to have been the most forward entrepreneurs: before the August races in 1755 it was claimed that there were 220 beds in the town for letting;\textsuperscript{344} some years later one innkeeper boasted of being able to provide stabling for sixty horses.\textsuperscript{345}

Youghal and Kinsale benefitted in the last twenty years of the century from the growing fashion for sea-bathing. Nearly £2,000 was spent on Youghal's assembly-rooms opened in 1789; Kinsale appeared in 1806 to one visitor to have become 'Bath in miniature',\textsuperscript{347} having already evolved from a place of summer resort to one of permanent residence for 'people of moderate incomes, who prefer pleasure to business'.\textsuperscript{348}

A much greater number of towns became centres of consumption as a result of the siting in them of various types of military establishment. The policy of quartering troops on urban inhabitants had been largely abandoned by 1700, and instead a network of barracks was built, the distribution of which was mainly determined by considerations of external and internal defence. But political influence in Dublin was also a factor, for the allocation of barracks (for infantry or cavalry) to a town, and the regular quartering of troops in it, were eagerly sought by landowners.

\textsuperscript{343} Smith, Kerry, p. 146; MacLysaght, Kenmare MSS, pp. 229-30.
\textsuperscript{344} Cork Journal, 14 Aug. 1755.
\textsuperscript{345} Advertisement by Charles MacCarthy, C.E.P., 5 July 1770.
\textsuperscript{346} Beaufort, Travels 1788, ii, p. 90.
\textsuperscript{347} Beaufort, Travels 1806-7, ii(1), pp. 8-9.
once the impact that they could have on local demand and land values became known. In 1713 there were, outside Cork city, about a dozen barracks in the region; some were to close, others to be established later, but this was about the total for most of the century. Early estimates of the value to a locality of a barracks - when in use - ranged from £500 p.a. to over £1,000 p.a. where a troop of horses was stationed. The cost of erection of a horse barracks c. 1719 was put at around £5-700.

Government military spending in the last quarter of the century and beyond was on quite a different scale and its impact, even allowing for the growth of the economy, was far greater in the two districts where most of it took place. Firstly there was the concentrated development of naval servicing facilities in the lower Cork harbour area from the 1770s. Cove's growth from a fishing village began in the American war; the massive scale of naval and victualling activity, of the transhipment of provisions and the repairing of transports rapidly created a new, if ill-built town. It was claimed in 1779 that £90,000 had been spent in the previous two years there and at Passage on naval repair work. After a lull, its

349. Barracks of Ireland c. 1713, Ireland: Privy Council papers, Gilbert MS 206/62 (Dublin City Library).


351. William Boyle, Dublin to Henry Boyle, 4-6 May c. 1719, Shannon MSS (P.R.O.N.I. D2707/A/1/2/6).

352. Coquebert de Montbret (B.N., n.a. MS 20,099, ff. 114-5); T. C. Croker, 'Recollections of Cork' [1833], ch. 15, p.25 (T.C.D. MS 1,206).

growth was resumed during the French wars; it was the service point for Haulbowline and Spike islands on which the most extensive complex of admiralty depots and ordnance arsenals in the country were built during the course of the wars, and artillery barracks, a military hospital and a range of forts were also constructed. Total expenditure on these was estimated at one million pounds in 1812; although this was staggered over decades, the local multiplier effects must have been very substantial. Complimentary to this, the two families between whom the site of Cove was shared, the Midletons and the Smith-Barrys, competed in their attempts to develop quays and other facilities in the town, and to attract capitalized tenants; £20,000 was reported to have been spent on a quay alone by the Smith-Barry trustees. (In the neighbourhood of Cork there were other major instances of military spending during the French wars, notably on the powder mills at Ballincollig, west of the city, which had been built initially by a private partnership c. 1794, but were taken over by the government in 1805; within five years it had invested over £200,000 at the huge 500-acre site).

The other centre of government spending was Fermoy. The site was acquired by John Anderson, while still a corn and provisions merchant in Cork in 1791; in the mid-nineties it was still a village of about fifty houses. When the government in 1797 were seeking a site for a new
barracks near Cork harbour along the route from Dublin, Anderson offered a large plot free of rent, tendered to build temporary barracks and was in a position to guarantee its provisioning. His offer was accepted, and over the next twelve years a permanent thirteen-acre general barracks (costing £50,000), an artillery barracks and a commissariat were constructed; the annual expenditure locally of the army when at full strength was put at near £100,000 in 1809, and this estimate was made before the completion of a second general barracks. Anderson in turn was said to have invested quite as much himself on developing the town as a staging-post, a market and manufacturing centre. The mushrooming town – which had grown to about 500 houses (excluding barracks) by 1809 – and the primary role of Anderson in creating this expansion was a matter of genuine astonishment to both local and outside observers. However its growth was certainly helped by its advantageous position in relation to the new intensive tillage district of Fermoy/Condons, and its rise was at the expense of neighbouring towns, in particular Kilworth.

Two other factors which influenced the evolution of inland trade remain to be noted briefly: the smuggling trade and communications changes.

By eighteenth-century standards of public administration the customs department of the Revenue establishment was competently run. Evasion of duty on the main export staples (to judge by the internal consistency of


the customs returns) was small. Smuggling was only pursued extensively in a few high-duty or prohibited commodities and was generally conducted in areas some distance from the city, away from obvious customs attention. In the earlier part of the period, official concern was mainly about the touchy issue of wool exports to France: both the Waterford and southwest coasts were assumed to be major export districts for this illegal traffic, and although many of the claims concerning wool smuggling were fanciful, the association of the region with the trade had some substance. In the decade when depressed wool prices did indeed lead to a traffic in this commodity to France, Irish exports to Nantes (the main destination for wool) came mainly from the region: of 205 ships coming to Nantes between 1733 and 1741 with cargoes which included wool from Ireland, 73% came from the region, 41% apparently from Cork itself. The havens around Clonakilty bay were singled out at this time as being an outstanding smuggling zone; indeed the interception of a wool cargo by the Revenue and its subsequent confiscation in 1741 were given as a legitimate excuse to Henry Boyle for rent arrears among his Clonakilty town tenants (it was also from this coast that woollen cloth destined for Portugal was laden). The prominence of wool in the smuggling trade was short-lived.


Far more important and enduring was the running in of brandy, tea and tobacco, mainly from Nantes in the first half of the century, later also from the Isle of Man, Roscoff (in Brittany), and Guernsey. This was conducted on local or joint account, and most of those active in such ventures were the gentleman tenants or small landowners of the remoter south-west, such as the Hutchins, the Orpens, the Puxleys and the O'Connells. But at least equally important were a few merchant families in Bantry, Enniskeen, Clonakilty and Dingle. Alliances between the different elements flourished at various times, that between Maurice O'Connell of Derrynane and his relation James Gould of Clonakilty being the best documented.

Run goods could be distributed to a variety of local outlets, or sold to Cork city dealers. Probably both means were always used, and as the efficiency of the Revenue could vary considerably between districts and over time, smugglers' arrangements obviously took account of this. In 1729 Charleville and Mallow came to the attention of the Revenue Commissioners as 'the places of abode of many bare-faced unfair dealers, whose trade consists in running goods, and bringing them from the county of Kerry';

363. Cullen, 'The smuggling trade in Ireland', passim.

364. For reference to the smuggling activities of the Orpens and the Hutchins, see Thomas Orpen, Killowen to Arthur Herbert, 13 Dec. 1748, 19 Feb. 1748/9, 30 Aug. 1749, Herbert MSS (P.R.O.I. M1,857); Commissioners of Revenue minutes, 25 Oct. 1732 (P.R.O. Customs/1/24, p.374); Thomas Hutchins, Bearhaven to J. Peed, 10 June 1783, Hutchins MSS (N.L.I. Mic. p928). For the Puxleys, see A. J. Fetherstonhaugh, 'The true story of the Two Chiefs of Dunboy: an episode in Irish history' in J.R.S.A.I., 5th ser. iv (1894), 35-43, 139-49.


366. Commissioners of Revenue minutes, 22 Dec. 1729 (P.R.O. Customs/1/21, p. 336).
subsequent reorganization of the local excise administration apparently
drove the dealers to west Muskerry for, three years later, reports came
that in Ballyvourney 'some of the most noted smugglers have settled a col-
ony and lodge run goods there to sell them to the retailers'.  
(Later in
the century one of the costly overheads for smugglers was claimed to be the
necessity to provide their customers with food, drink and lodgings).  

The attraction of direct dealing with the city was that cash payments were
more forthcoming than with country purchasers (although it was some-
times claimed that dealers in smuggled goods only accepted specie).  

The country 'retailers' ranged from pedlars who hawked tobacco and tea,
selling them in small quantities, to merchants and tobacconists in the
market towns.  

The scale of smuggling to the total regional trade in brandy, tea and
tobacco is impossible to measure. Downward adjustments in duty levels and
the coming of war brought sharp falls in illegal trading, and various
initiatives of the Revenue Commissioners brought temporary or permanent sus-
pensions of it. In the third quarter of the century the greater part of
the tea consumed in the region had probably been smuggled, and that was a
time when overall tea consumption was rising; it almost disappeared from
the smuggling trade after 1784 when duties were lowered.  

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367. C. of R. minutes, 24 April 1732 (P.R.O. Customs/1/24, p. 112).
368. Ní Chinnéide, 'New view of Kerry', 86.
369. Francis Sullivan to Maurice Connell 17 June 1756; James Gould,
Clonakilty to Connell, 19 Jan. 1771, O'Connell MSS. A/3/14; A/11/1.
370. See advertisement by Cork dealers in tea in Cork Journal, 14 May 1761;
371. James Gould, Clonakilty to Connell, 25 Feb. 1772; Gould, Cork to
Connell, 25 Aug. 1777, O'Connell MSS A/11/9, /13; Cork Journal, 14 May
1761.
372. J. M. Barry, Report on the state of fevers and other infectious
diseases in the city of Cork ... (Cork, 1801), p. 6; Cullen, 'The
smuggling trade in Ireland', 168-70.
run tobacco grew in importance - the Enniskeen/Clonakilty 'company' of smugglers were said in 1776 to be supplying even Tipperary and Limerick - and it alone remained a significant smuggled item beyond the turn of the century. By the 1780s smuggling activity in general was falling off with improved revenue surveillance, a declining demand for imported spirits, and excise changes. Dingle's decline for instance began in the late 1750s with the capture and confiscation of eight local smuggling vessels, and was drawn out over the next three decades; Kenmare was similarly affected by the loss of eight or nine ships c. 1787. The running of goods became a more specialized occupation for those that remained, the old entrepreneurs withdrawing to safer investments and leaving it to those prepared to fit out larger armed vessels and to challenge the Revenue service more vigorously.

Another form of smuggling that intermittently occurred was when East Indian ships put in to Kinsale or Cork for repairs, or while they waited for convoy. Such visits were the occasion for merchants and private individuals to make illicit purchases from them of china, cottons and other East India goods to such an extent that cash became noticeably scarce afterwards. In 1748 for instance a Castlelyons correspondent was struck by the number of women 'of fashion' gone off to Kinsale to get china bargains. The Customs attempted with intermittent success to stop this

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375. For references to armed vessels, see reports on a Castletownsend cutter captured (Hibernian Chronicle, 26 April 1784), and a Ballycotton one that escaped (Cork Gazette, 20 Aug. 1791).

traffic, but even in Cork itself a ship in 1769 managed to sell of £12-13,000
of eastern goods, seriously affecting it seems the local textile trade. 377

* * *

In 1700 most goods transported within the region went either on a
horse's back or on a coasting vessel. The road system was poorly developed
and only a limited number of routes connecting market towns were fit for
coaches or even carts. When improvement came it was not because of the
demands of the livestock or butter trades, but in order to facilitate the
movement of bulk goods such as sand, limestone, turf, coal, timber, building
materials and rock salt; where river navigation was available, such goods
were moved by water and small road systems converged on landing quays. As
for passenger movement, two factors encouraged road improvement: the en-
closed coach which developed as a status symbol among country gentry in the
early decades of the century, was both a cause and a consequence of a more
comprehensive road network, and towards the end of the century and after,
the public coaching services, specifically the mail-coaches, created a
demand for better standards of road maintenance and easier gradients.

Before the 1730s responsibility for the maintenance of existing roads
had rested with individual parishes. Where vestries carried out their
obligations, it was usually a case of parish overseers or 'way-wardens'
who organized duty labour for the repair of roads deemed in need of it. 378
The levy of a small parish cess was introduced after the 1759 statute
ending duty labour. 379 Presentments brought before the county Grand Juries
in the early part of the century were mainly concerned with the construction

377. Viscount Townshend, Cork to Viscount Weymouth, 13 Sept. 1769, Cal.
Home Office papers 1766-9, no. 1,263.

378. Castlehaven parish register (Church of Ireland), 30 Sept. 1746, 26
July 1757; report on the records of the parish of Mallow in Analecta
Hibernica, xv (1944), 378.

379. J. H. Andrews, 'Road planning in Ireland before the railway age', in
Irish Geography, v(1), 19.
and repair of bridges, some of which, like the one over the Blackwater at Fermoy that cost £1,500 in 1685, were major public works. The problem of the upkeep of main thoroughfares was eased in the 1730s with the creation of parliamentary-saisioned turnpike trusts which 'enclosed' the existing Cork-Mallow-Limerick and Cork-Kilworth-Clonmel roads (the latter being the main Dublin route) with a spur from Kilworth to Doneraile. However a much more important development was the Kerry turnpike, authorized in 1747 and sponsored by several Kerry landowners, in particular Viscount Kenmare; a totally new route was laid out from Cork liberties across Muskerry and the Boggeraghs; it divided at the Kerry county border, the main section going to Killarney and a secondary one north to Listowel. Financially it may not have been an early success - by 1767 £6,241 had been expended on construction, maintenance and interest, while the tolls had only brought in £4,967 - but economically it reordered the pattern of Kerry trade with Cork, encouraging greater use of land carriage and benefitting Killarney as a centre over the old gateway to Kerry, Castleisland. Turnpikes fell out of favour by the 1760s - the main Kilworth one was badly run and heavily in debt before then - and with the acquisition of more


381. Andrews, 'Road planning', 23. In 1755 a new route from Mallow to Newcastle West in Co. Limerick was also sanctioned, and was subsequently built; one from Cork to Kanturk sanctioned in 1765 was only partially completed: Freeman's Journal, 28 June 1768.


383. James Hartnett, Cork to Sir Maurice Crosbie, [c. 1751], Crosbie MSS (T.C.D. MS 3,821/220); Smith, Kerry, pp. 120-1, 169-70; MacLysaght, Kenmare MSS, pp. 185, 201.

extensive powers of compulsory purchase, Grand Juries became in the long run the main arbiters of new road investment, although some decisions were inclined to reflect particular landed interests: new road construction opening up the district east and south of Bantry in the 1760s and 1770s was presumably at the instigation of Richard White, but it was not money wasted.  

The process of infilling financed by county cess gathered pace towards the end of the period; annual presentments for Co. Cork (including items unrelated to bridges or roads) had amounted to £1,050 in 1731; in 1790 they stood at £18,903. That year saw the beginning of a regular mail-coach network; pressure to extend this service together with the provision (in 1805) of central government loans and surveyors led to the construction of further new and wider trunk roads over the next quarter of a century, the most important being roads from Cork to Skibbereen, Cork to Kinsale, and Macroom westwards towards Killarney. Cork Grand Jury presentments in 1810 (when roads were still the main item of expenditure) amounted to £66,849; those in Kerry rose as sharply in the first decade of the new century. At the eastern end of the region a new road forty-two miles in length, was built c. 1790-1 costing about £10,000 from Waterford city to the Cork border near Tallow; this was a mail-coach route from the beginning, and its promoter, the Marquess of Waterford, had wanted it to be continued to Cork city; as it was it cut about a fifth off the road distance between

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386. 'Kinsale manuscripts' in Ana. Hib., xv (1944), 203-4; Report of the select committee on the state of the poor in Ireland, H.C. 1830 vii (667), 64.

the two cities.388

There were other sources of investment in road development apart from turnpike trusts and Grand Juries. Landowners, directly and indirectly were responsible for the building of many secondary roads, particularly on inaccessible estates like the Kenmare and the Kingsborough ones.389 Generally it was a case of linking farms with sources of natural fertilizer or turf bogs, or helping with the building of a bridge.390 None however can have rivalled the investment in inland communication of John Anderson; around 1789 he got a dominant interest in the Dublin-road turnpike out of Cork, and with another Cork merchant successfully tendered to run the new mail services to Dublin in that year.391 The venture was obviously profitable, for in 1793 he entered into a partnership with a Dubluner to improve the Dublin-Limerick road, run the mail service on it and levy tolls; the cost of repairs to that road alone was put at £27,000, which sum Anderson agreed to put up.392 He was in effect a forerunner of Bianconi, developing a different passenger market but doing it with comparable flair. Among his many interests in Fermoy was the development of it as a major stage for his Dublin and Limerick mail coaches; coach manufacture itself was established in the town, presumably under his auspices.393

388. Marquess of Waterford, Waterford to the Duke of Devonshire, 22 Nov. 1791, Devonshire MSS (P.R.O. N.I. T3,158); 'Bowman's reports', 277, 312. It is unclear who underwrote the £10,000. In 1796 the road was 'turnpiked'.

389. MacLysaght, Kenmare MSS, p. 201; Young, Tour, ii, append, p. 69.

390. Over £7,000 was spent on a new bridge at Lismore by the Duke of Devonshire in the 1770s: L. Price, ed. An eighteenth-century antiquary: the sketches, notes and diaries of Austin Cooper (1759-1830), (Dublin, 1942), p. 19.

391. See advertisements re the turnpike, (Hibernian Chronicle, 5 Nov. 1789) and re mail-coaches (H.C., 24 Jan. 1793).


There was always limited goods traffic between Cork and Dublin by road; at least one 'carman' operated regularly between the cities at the beginning of the eighteenth century.\(^{394}\) The general growth of the economy, coupled with the extension of the Grand Canal, the rise of flour milling for the Dublin market, and the apparently enhanced position of Dublin as a national centre of distribution led to a much greater volume of traffic. From 1790 a well-organized wagon service to Dublin was started from Cork, being extended to Bandon in 1795.\(^{395}\)

The rise of wheeled transport for the conveyance of farm goods to and from market was gradual; both the improved road system and the growth of the grain trade accelerated the process. By mid-century 'truckles' were probably common enough on large farms in the north and east of the region. However military surveyors in 1756 and 1778 each commented on the total absence of wheeled transport from the Bantry district on visits there in 1756 and 1776.\(^{396}\) And in 1790 de Montbret on entering Kerry from Cork observed that the slide-car still predominated.\(^{397}\) Elsewhere the solid-wheel car, able to carry about half a ton, was becoming common, and the influence of the Grand Jury's spending in bringing this about was recognized. Even in Muskerry it was stated that 'wheeled carriage' was universal by 1810.\(^{398}\) By that time the spoke-wheeled Scotch cart, able to carry about eighteen hundredweight was becoming common commercially, and attempts were being made to encourage farmers to change to it.\(^{399}\)

\(^{394}\). Edward Ferral, Dublin to Dominick Sarsfield, 24 March 1728, Sarsfield MSS (N.L.I. Acc. no. 2,930).

\(^{395}\). See advertisement in C.E.P., 20 April 1795.

\(^{396}\). Report on Cork, 1756; third report by Vallencey, 1778, Pelham MSS (B.L. Add. MS 33, 118, ff. 69-70, 137, 139).

\(^{397}\). Ní Chinneide, 'New view of Kerry', 85.

\(^{398}\). Townsend, Cork, pp. 219-20, 651.

\(^{399}\). Munster Farmers' Magazine, ii (1812-3), 53-6.
Investment in inland navigation was decidedly less productive than that in roads. From mid-century there was a plethora of schemes, few of which were even partially translated into reality and with little economic result. The availability of parliamentary grants and the example of enterprises elsewhere led to separate attempts in the 1750s and 1760s to extend the navigable limits of the three main rivers, the Bandon to Dunmanway, the Lee towards Macroom and, most ambitiously, the Blackwater from Cappoquin forty-five miles to the newly-discovered culm pits near the river, south of Kanturk. It seems that about £25,000 was approved by parliament for these projects, but only in the case of the Blackwater scheme was progress made: about five miles (mainly on the upper section) were built - to no purpose. 400 There was a revival of interest in the 1790s; the short link between Cappoquin and Lismore was opened for lighter traffic in 1794, built on the account of the Duke of Devonshire; 401 £20,000 was raised to extend it up to Fermoy, but the plan was abandoned. 402 Devonshire's fellow absentee, Viscount Midleton, refused to consider making a loan of £6,000 for a canal from the sea to Midleton. 403 There was even a proposal to link Cork and Limerick by canal and a line was surveyed, but Limerick interests killed it off. 404 The only productive use of public funds to improve navigation in the period, was the £10,000 spent deepening the channel below Cork city and improving the lower quays. 405 It was the only realistic project in the circumstances.

400. J.H.C.I. I, 242, 370; VII, 234, lxxxix; XIX, xxi-i.
401. 'Bowman's reports', 277-8, 289, 312; Mason, Parochial survey, i, pp. 556-7.
VII

INDUSTRY

The agricultural-processing trades were only one segment of contemporary industrial activity. At least three others can be detached: industries linked to natural resource extraction; labour-intensive cottage manufacture, working predominantly for export and, finally, capital-intensive industries, some of which emerged towards the end of the period and produced consumption goods for the domestic market.

In the first category, timber-processing and shipbuilding industries have already been noted in their seventeenth-century context.

One of the near disappearance of the pilchard after 1700 marked valuable centres of economic activity in the south-west, on the creation of herded rinder cattle, resulted several other growth of their only non-agricultural source of wealth. Such surviving woollands c. 1600 was rather in relation to wool to export on Catholic India - to the Americas, East, Eastery and parts of South Europe for elsewhere note that the interest of demand for charcoal from the iron furnaces and forges, for oak timber from the ovens, and for oak bark from the treecuts had enabled coal manufacturing to clear methods.

With each the timber and bark referred to theé textile and since 1702 encountered a destructive onslaught by the producers of toiletted animal skins. The consequence, according to a Hudson observer in 1706, that 'in a very little time there will not a wood left in this country'. There were some modest attempts at the conserving of surviving woods after this period on a number of estates, and local hardwood extraction went on in the market, at times in sufficient quantity to keep the less than dynamic benching.

1. See above, p. 117.

The agricultural processing trades were only one segment of contemporary industrial activity; at least three others can be detected: industries linked to natural resource extraction; labour-intensive textile manufactures, working predominantly for export and, thirdly, capital-intensive industries, most of which emerged towards the end of the period and produced consumption goods for the domestic market.

In the first category, timber-processing and pig-iron manufacture have already been noted in their seventeenth-century context. Just as the near disappearance of the pilchard after 1700 weakened maritime centres of economic activity in the south-west, so the erosion of hardwood timber stocks robbed several other areas of their only non-agricultural source of wealth. Most surviving woodland c. 1690 was either in remote locations or was on Catholic land - in Muskerry, Bear, Bantry and parts of south Kerry - for elsewhere more than half a century of demand for charcoal from the iron furnaces and forges, for oak timber from the coopers, and for oak bark from the tanners had tempted most landowners to clear woodland. High wartime timber and bark prices in the 1690s and after 1702 encouraged a destructive onslaught by the purchasers of forfeited estates with the consequence, according to a Bandon observer in 1704, that 'in a very little time there will not be a wood left in this country'. There were some modest attempts at the conservation of surviving woods after this period on a number of estates, and local hardwood continued to come on the market, at times in sufficient quantity to keep the less than dynamic tanning

1. See above pp. 38-41.

2. Thomas Foster, Bandon to Henry Boyle, 3 July 1704; cf. Foster to Boyle, 7 Aug. 1697, Lismore MSS (N.L.I. MS 13,232). For other comments at this period, see depositions re Barloom woods, 1699-1700, in Annesley MSS (P.R.O.N.I. D1854/2/45); Berkeley Taylor, Ballymacow to Baron Perceval, 6 March 1717/8, Egmont MSS (B.L. Add. MS 46,983*, p. 29 [N.L.I. Mic. p4,675]).
trade supplied with bark (although even at such times English bark seems to have been preferred by city tanners). Few of the several thousand tons of hardwood required for barrels each year in Cork can have come from domestic woodland at any time in the century; the bulk of barrel staves was imported. None of the measures to encourage replanting—lease covenants or estate nurseries, the premia offered by the Dublin Society or the statutory penalties against wasting of timber—led to commercial (as opposed to landscape) planting on any scale. In 1803 Townsend believed that tree-planting, alone among the various forms of rural improvement was in decline, and that there was in fact less timber locally than there had been forty years previously. The contemporary explanation for this phenomenon was that the costs of coppicing and conservation were too high, given the notorious frequency of the pilfering of saplings for use as 'scallop' (roofing rods); one agent, endorsing the decision to cut down an ash plantation in 1784, observed that 'even Lord Shannon complains that he can keep no trees that are not within his park-wall'. But a more fundamental reason for the absence of commercial replantation on lowland was the lower return it appeared to offer to that from alternative forms of land use.

3. Richard Purcell, Kanturk to the Earl of Egmont, 16 Apr. 1750, Egmont MSS (B.L. Add. MS 47,014*); William Welland, Cahirmone to the Bishop of Kilmore, 29 Nov. 1797, Midleton MSS (N.L.I. MS 8871/6); Wakefield, Account of Ireland, i, pp. 566-7; McCracken, Irish woods, pp. 81-2, 118.


5. Townsend, Agriculture of Cork, p. 53.


7. Copy, [Charles Brodrick], Midleton to Viscount Midleton, 4 June 1784, Midleton MSS (N.L.I. Mic. p4,295).
In such a context, where local charcoal supplies were dwindling, pig-iron manufacture slipped away into insignificance. Between 1600 and 1800 furnaces (with or without forges) had operated at over forty locations in the region, mainly along the Blackwater and in the extreme south-west. 8

Eighteenth-century smelting activity was limited to the Petty estate in south Kerry, the Bear peninsula, and the Araglin valley in north-east Cork. The Kerry development was a revival of Sir William Petty’s activities; there, Henry Petty joined in a partnership in 1706 to build a series of furnaces and forges at three sites, and £5,000 was expended on them by 1710. The supply of both local ore and charcoal was sufficient to maintain operations at one of these locations until the 1750s; output over the ten years ending in 1731 (when there had been activity at two sites), averaged about £2,700. 9 Further south, the Coomhola furnace and forge (on the north of Bantry Bay), where local and English ores were used, remained in production from the 1690s until the 1750s. Richard White was directly involved in the 1730s; his continued acquisition of extensive landed property from that decade was presumably assisted by this (as well as by his fishing and other trading ventures). 10 Coomhola’s demise in the early ’fifties was apparently caused by the exhaustion of local timber supplies and this was also the explanation given for the closure of the last Petty iron-works c. 1752. 11 The absence of any programme of coppicing was partly, it seems, because of the pasture quality of the land cleared, but wider price changes in the market for pig-iron, following the growth of Russian production, may explain the actual chronology of

8. This estimate is based on map 5 in McCracken, Irish woods, p. 91.
decline. At Araglin, some measure of timber conservation must have been practised, for there the tradition of iron production, in one form or other, lasted from the 1620s until after 1790, although as early as 1675 there were charcoal supply problems.  

An adequate ore supply in the neighbourhood was presumably the factor maintaining production; some of the region's coarser ironware, notably pots, came from here.  

The role of city merchants in local iron manufacture was minimal. William Hovell was probably unusual in 'having a place whereon is a forge to work iron into bars and charcoal cheap' in 1684; he sought to import pig-iron from Bristol. Cork merchants were of course ready buyers of local bar iron, and several water-powered slitting and shovel mills (with forges attached) were in existence near the city by at least the mid-eighteenth century.  

At the end of the 1780s larger-scale iron casting commenced (probably using Baltic iron) when three foundries were established, one in the city, two in the vicinity.  

Other forms of extractive industry, coal and copper mining, like iron manufacture, failed to attract city speculation. The only common thread linking mining activity across the region was the insuppressible optimism

12. Abstracts of Roch letters, 6 Feb. 1674/5, 19 May 1675, Lismore MSS (N.L.I. Ms 7,177); Smith, Cork, p. 357; ní Chinnéide, 'Frenchman's impression of Cork', (1973), 117; McCracken, Irish woods, p. 166.  


14. Copy, [Hovell] to George Loop, 6 June 1684, Hovell letterbook.  


16. E.g. advertisements by Widow Fish of the iron mills on the Lee, Cork Journal, 2 March 1758; and of the North Abbey iron mills, C.E.P., 9 June 1763.  

17. See advertisements by T. Hughes referring to Healy's Bridge foundry (Beechmount), C.E.P., 31 Jan. 1788; by Seymour & Bell referring to that on Lapp's Island, C.E.P., 26 Jan. 1789; by T. Fitton referring to that at Lower Glanmire, C.E.P., 18 Oct. 1790.
of many landowners, which led them to bring over English and Welsh 'searchers' to prospect and advise. There were two particular areas of activity: the upper Blackwater valley in Duhallow, and around Killarney. Before 1700 culm deposits were suspected in the former area, but the first pits worth working seem to have been discovered in the 1720s; further discoveries in the 1750s were large enough to justify an attempt in parliament to get funds for a Blackwater navigation, a scheme that was revived after 1800. The greatest spread of activity was in the 1760s when pits on four estates were being worked; the culm remained wholly in the district for use in lime-burning and malting. The best pits were those at Dromagh on the Philpot/Leader estate, and the profits accruing to the family were said (retrospectively) to have been about £800 p.a. c. 1770. When the Dublin Society mineralogist visited the site around 1799, he was not impressed by the sight of the tenants 'labouring hard in bringing up water with a windlass' and inefficiently working only the uppermost stratum; he was informed that they paid their landlord one-half of the coal raised. In the 1820s there was to be considerable investment by Nicholas Leader in the colliery.

19. 'Lockler's 'Mallow in 1775', 25; R. Brocklesby, A letter to a member of the Irish Parliament relative to the present state of Ireland wherein many advantages are laid down which would arise to the province of Munster ... from improving ... the navigation of the Blackwater ... (London, 1755), passim; n Chinnéide, 'New view of Kerry', 91.
21. 'Report of Donald Stewart' in Transactions of the Royal Dublin Society, i (1799-1800), 21. It is assumed that Stewart was referring to Dromagh from his geographical references. Cf. Townsend, Tour through Ireland, p. 66.
22. Lewis, Topographical dictionary, i, p. 509.
More spectacular if more erratic was the copper mining activity on the Herbert and Kenmare estates near Killarney. When extensive copper-ore deposits were found at Muckross on Lough Leane, it was rumoured that Edward Herbert had been offered £12,000 p.a. for the mining rights; certainly 375 tons of high-grade copper ore were mined within a year by a partnership dominated by the Herbert family, and ore sales of £25,000 were said to have been made before the mines were abandoned some years before 1776. Flooding seems to have been an insoluble problem here; it also hindered the exploration of ore seams on Viscount Kenmare’s nearby Ross island, which were worked intermittently from the 1750s. High wartime copper prices encouraged what was the most determined attempt to mine the Ross deposits after they were leased by a company for £2,000 p.a. in 1803: in the four years up to 1808, £50,000 were spent, including £4,000 on a thirty-five h.p. steam pumping-engine. However the mine was abandoned about 1811, water again seeming to have halted exploitation. During its operation four to five hundred workers had been employed by the various sub-contractors who actually worked the mine and provided the tools.

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26. Dillwyn's Tour, 1809, f. 69 (loc. cit.); Wakefield, Account of Ireland, i, pp. 131-4, 724.
Traditional woollen frieze cloth and heavy Irish mantles had probably been modest export items from the region for much of the medieval period. After the plantation, raw wool exports to England quite overshadowed this trade: in 1626 a mere 5,676 yards of frieze left the region. Recorded wool exports climbed to a peak at the end of the 1630s of almost 66,000 great stone (see above, table 1:iv), but this had fallen by about half by the 1680s. The shift into dairying was the main reason for this, but cloth manufacturing was taking up a significantly greater proportion of the local wool clip. In the years 1683-6, the value of wool exports averaged somewhat over £12,000, at a time when frieze exports were worth over £13,000, and those of new draperies about £7,000.

The sources for these two types of cloth were totally different. Frieze, the common clothing fabric of the countryside, was produced by Irish weavers and purchased by dealers at fairs and markets. About 70% of frieze exported between 1683 and 1686 went to France, most of the remainder to England. New draperies by contrast were woven in a number of urban centres where new English settlement was concentrated, Bandon being the most important example: from the 1620s it had been a cloth-producing town as much as a plantation service point. In the 1630s the new colony had concentrated on broad cloth, and one leading clothier had an export trade to the Low Countries worth £500 p.a. In the second half of the century, weavers and manufacturers of West Country origin were part

27. Exports of Ireland, 1626, Sackville MSS (Kent Archives Office U269/ON, 4,896).
28. See above, p. 45.
29. This is accepting the official customs valuation of 1683.
30. See accounts relating to alnage collected at Cork etc., 1692; alnage receipts, 1692-3, Conolly MSS (P.R.O.N.I. T2825/B/5/3, /6).
31. Cork depositions, 1641, iii, p. 118 (loc. cit.).
PATTERN of 18th CENTURY COMMERCIAL TEXTILE ACTIVITY

- Putting-out centre for wool spinning
- Town associated with commercial woollen manufacture
- Linen manufactory or market
- Centre for wool spinning and linen manufacture
- Woollen and linen manufacturing centre

Limits of intensive flax-growing area 1800

MILES

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of the continuing English immigration into the region, so that around Cork city itself, at Bandon and even at smaller urban settlements such as Cappoquin, cloth manufacturing assumed a new prominence. Following English trends, new draperies became the main cloth type produced. Some of this was for local consumption, but the greater part was exported, serges to Holland, bays mainly to Iberia and the Mediterranean. Clothiers were closely linked to the major export merchants; for instance, at Bandon in the 1680s there were two large employers 'with all the workers... at their will' who contracted with Cork merchants to manufacture a given number of pieces, with lengths and patterns determined by the exporter, or if he was working on commission, by the English or Dutch principals.

After the disruption of the Jacobite period the recovery of economic activity included a revival of cloth manufacturing in a number of towns. National exports of new draperies in 1695 (2,608 pieces) were well below the level of the 1680s, but by 1698 they had jumped to over 20,000 pieces. Nearly three-quarters of national exports had come from the region's ports in the 'eighties, and although the proportion had fallen to about three-fifths in 1698, south Munster was still the unrivalled centre of new draperies manufacture in the country. In that year the value

33. See copy, [Hovell] to Houblon, 1 March 1685/6, Hovell letterbook.
34. E.g. copies, [Hovell] to Houblon, 19 Sept. 1684, 22 Jan. 1685/6, Hovell letterbook.
36. Hovell letterbook, passim.
of the region's new draperies exports had risen to over £35,000. Apart from the earlier centres of the trade, Cork and Bandon, weavers were finding employment in Youghal, Tallow, Cappoquin, Kinsale and Mallow. The sharp growth of the industry was one facet of the short export boom enjoyed by the Irish economy that followed the fall in the value of the guinea in England in 1696, while the guinea in Ireland remained unaltered; in the short term the high nominal valuation of English coin in Ireland gave the external purchaser of Irish goods an advantage - which would sooner or later be cancelled out by rising costs. Some migration from the West Country and East Anglia - of capital and artisans - resumed, although it was probably less important in accounting for the growth of production than the English woollen lobby made out. Local merchants and landowners (some of whom had fled to England during the Jacobite troubles) were the most active promoters of this expansion, and several Dutch factors were also prominent in placing orders for white cloth while the boom lasted.

The fact that higher domestic prices were likely to terminate the exchange advantage which Irish merchants enjoyed was not fully recognized either by local enthusiasts for the woollen manufacture, or the West Country cloth lobby, stung by the success of the Irish woollen manufacture and the threat it implied to what was a major raw material source. The English parliamentary campaign against the Irish cloth trade which began in 1697, when a bill to prohibit the export of Irish woollens was first mooted, was greeted in Cork with almost apocalyptic dismay by

38. Cullen, Economic history of Ireland, pp. 30-4.


40. Abraham Lawton, Youghal to Roger Hoar and co., 14 Aug. 1696 (P.R.O. Chancery Masters Exhibits, C/104/12); evidence of Sir Francis Brewster, 29 April 1697; Mr Culliford, 5 May 1697 to the Board of Trade (P.R.O. C.O./391/10, pp. 87, 98-9); MSS of H. of L. iii, pp. 108-10.
the new English: 'I reckon there's an end to the growth of this country' was one first reaction. \(^41\) Local opposition to it echoed sentiment elsewhere that the woollen trade as then being conducted was proving an unusually successful way of developing English immigration, and that it was ironic that the industry should be aborted because of its very success: 'tis the British only [will] suffer by this'. \(^42\) The constitutional as much as the economic implications of the legislation inflamed some, such as the Cork merchant, Christopher Crofts: 'Had they made an act to have hanged us all, it had been better to die martyrs than to live slaves'. \(^43\) The statute itself effectively closed all foreign trade in Irish woollen cloth passed into law in 1699, and during the summer of that year reports came from Cork that weavers, as predicted, were emigrating; in August Thomas Southwell wrote to an English correspondent of 'the deplorable condition of many families that are starving, who were concerned in the bays trade, and all of them English ... 300 families left this city last week and embarked for Holland, in order to go to 'Sweedland' ... There are 800 gone in all from and about this city, Tallow, Bandon, Midleton and Youghal, so that there are no common English left in this country at all, which was the only place like an English plantation in Ireland'. \(^44\) Some emigration, if perhaps not quite on this scale, almost certainly occurred from the woollen towns, but as many migrants were only newcomers anyway, it seems more plausible that they would have returned to England rather than travelled to the exotic destinations asserted by contemporaries and later writers.

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41. James Waller, Kinsale to Sir Robert Southwell, 9 April 1697, Southwell MSS (B.L. Add. MS 38,149 [N.L.I. Mic. p1,046]).

42. Ibid.

43. 'Extract from Alderman Crofts' letter, 2 June 1699', Southwell MSS (B.L. Add. MS 21,133, f. 39).

44. Thomas Southwell, Cork to Lord Coningsby, 6 August 1699 (P.R.O.N.I. D638/30/9); cf. 'extract from Ald. Crofts' letter'.
Frieze was also affected by the Woollen Act, but less severely, for although the export prohibition on Continental trade applied to it also, the duty on its import to England (in contrast to the tariff on old and new draperies) remained quite low. The character of this trade had already been changed by the escalating French import duties dating from 1688: 45 in 1698 and 1699 large amounts were exported to Iberia, and after the passing of the act, frieze exports were halved (all, of course, going now to the English market) and then fell away after 1701 (see Append. table xviii).

With the closing of the legitimate export trade in woollens, there were three possible developments, assuming that emigration did not drain off much of the manufacturing capacity that existed in 1698. Attempts could be made to smuggle cloth to those markets that had proved profitable before the prohibition. Manufacturers could alter their pattern of production and specialize in an intermediate product for the English market, i.e. the export of wool already spun into yarn. Or they could concentrate on meeting the cloth requirements of the home market. These options were not mutually exclusive, and there were elements of all three in the subsequent history of the region's woollen industry.

The importance of cloth smuggling is particularly difficult to evaluate. That it was of some importance between the late 1720s and the early 1740s is incontrovertible, but how regular a trade it was outside that period is less clear. The problem is not so much a question of resolving contradictory evidence, as one of assessing the credibility of contemporaries who asserted the existence and importance of such a traffic, and who had an interest in publicizing it in order to gain political concessions in related areas. All forms of evidence confirm that insofar as an Irish trade in smuggled cloth existed, it emanated almost exclusively from the Cork region, that it was directed to Iberia, in particular Lisbon, and that

45. Christopher Crofts, Cork to Sir Robert Southwell, 11 June 1688, Southwell MSS (T.C.D. MS 1,180); Cullen, Economic history of Ireland, p. 33.
the main cloth involved was camblet, a light variety of stuffs. Before
the 1720s claims of cloths being smuggled were the exception; most reports
were concerned with wool running to France. Such an exception was in 1711
when a sizeable quantity of frieze and stockings was being exported to
Lisbon, but the 'transports' bound for Portugal on which they were laded,
were forced by weather into Plymouth where their cargo was confiscated;
the contents were worth 'at least 10,000 pounds' according to Christopher
Crofts. From the early 1720s reports of Irish woollens arriving in
Portugal began to grow. These were treated sceptically by the Irish
Revenue Commissioners in 1723, but when a Cork mariner in 1729 claimed to
have gone on thirty-five cloth runs to Lisbon and gave details of the
ships and masters involved, they appear to have accepted his evidence.
Both as a response to this and to the growth of general smuggling, Revenue
'guard ships' were intermittently employed along the south coast after
1730; between 1732 and 1743 at least five ships carrying camblets (and
other woollen stuffs) were intercepted near Cork, Kinsale and Clonakilty.
Most of these were Cork or London vessels also carrying butter, barley,
hides and other commodities to the Portuguese market. The value of camb-
blets taken on these occasions varied from £1,500 to £5,000.

46. Crofts, Cork to Sir John Perceval, May 1711, Egmont MSS (B.L. Add.
46,978*, N.L.I. Mic. p4,674). This estimate of their value in-
cluded two of the transports which had been captured by the French.

47. Copies, James Forth, Customs House, Dublin to William Trench, 26 July
1723; Forth to Samuel Jolly, 17 Feb. 1728/9; Forth to William Maynard,
4 March 1728/9, 17 April 1729, letterbook of the Commissioners of
Revenue, 1714-31 (N.L.I. MS 16,007, pp.126, 186-7).

48. Copy, Commissioners of Revenue, Dublin to the Lords of the Treasury,
24 July 1730, letterbook of the Comm. of Rev.

49. Commissioners of Revenue minutes, 13, 14, 17, 21, 24, 28 Jan. 1731/2;
20 July 1733, 12 Jan. 1733/4 (P.R.O. Customs/I/24, pp. 27, 29, 32,
38, 44-5, 52; /25, pp. 231, 434); William Perceval, Dublin to the Earl
of Egmont, 21 Aug. 1740; Richard Purcell, Kanturk to Lord Perceval,
20 March 1740/1, Egmont MSS (B.L. Add. MSS 47,007A, f. 137; 47,001A,
f. 115); Pue's Occurrences, 5 July 1740. In a number of other re-
ferences about this time to 'wool ship' captures, it is not clear
whether the cargoes were wool or cloth.
The relevant Portuguese statistics have not survived to trace this trade, but there were several British consular estimates: in a general review of Anglo-Portuguese trade in 1729, it was assumed that 5,000 Irish camblets were imported annually (worth about £26,400) and that they were accompanied by about £1,500 worth of stuffs, rateens and friezes.  

Authenticated extracts from the Lisbon customs ledgers for 1729 and 1730, detailing Irish imports were produced before a British House of Lords committee in 1731 which put the incoming number of pieces at 5,259 and 4,866 respectively. A similar committee three years later received amid many colourful statements about the camblet trade - details of eighteen ships that were said to have carried 14,000 Irish camblets to Portugal in 1733. This latter estimate, implying a marked growth in the trade, is hardly credible because not only had the guard ships become increasingly active, but one of the legal loopholes in the 1699 act had been closed in 1732; until that year every seaman had been allowed to export forty shillings worth of woollen cloth, and the cancellation of this concession then was regarded as a greater blow than the guard ships, it having been 'always a cloak for carrying off much more'.

The intermittent ship seizures in the late 1730s and early 1740s point to the continuance of cloth exports, although probably at diminished levels. The local agitation against the lowering of the value of gold

50. 'Remarks on the estimate of British trade to Portugal', 6 Aug. 1729 (P.R.O. S.P./89/35).
51. Egmont diary, i, 9, 15 Feb. 1730/1. For other estimates, ibid. 15 March 1731/2; 5 April 1732.
coinage in 1737 (which bill-dealers certainly helped to stir up) was linked by some to the camblet trade and the opposition of woollen exporters; the belief was that the major supply of local gold coin (which was indeed Portuguese) came from direct trade with Portugal, and that the revaluation of the currency was yet another means of discouraging cloth exports. Whatever the truth of this, one Cork manufacturer was reported to have struck off forty men the day after the proclamation while others were seeking to reduce wages commensurately. But there is no indication of a subsequent slump in cloth exports. Indeed it seems that the local guard-ship commander 'winked' at the trade for several years, in return for information from landowners in the south-west about other smuggling activities. His subsequent seizure of a large consignment of camblets in 1740 created something of a furore.

After the early 'forties the history of this trade is problematical. There is no evidence of specific customs surveillance, or of ships captured with woollen cloth. And not until the late 1770s are there any surviving estimates of the size of the trade. As for reports from the Portuguese end, a 1767 survey of British and Irish exports did list camblets from Ireland as a standard item, but no estimate of the trade's

54. E.g. Taylor, Egmont to Perceval, 20 April 1733, Egmont MSS (B.L. MS 46,998*, p. 100 [N.L.I. Mic. p4,677]).
57. Young gives a figure of £40,000 as the average annual value of 'camblets, serges, &c.' exported over the nineteen years ending 24 March 1773; he was given this figure by Robert Gordon, the Surveyor-General of customs in Munster: Young, Tour, ii, p. 65.
There are however several reasons for assuming the continued importance of the export manufacture: camblet-making remained the most distinctive cloth type associated with the worsted weavers of Cork city and Bandon, and although it may have been marketed completely inside the country, there is no evidence of a major internal transfer of camblet beyond the Cork region. Furthermore, the impact on Bandon of the 1755 Lisbon earthquake - reportedly costing the town £14,000 - may have been because an export trade in butter and hides on local account existed, but losses of cloth despatched to Lisbon seem a more probable explanation. The absence of customs interest in cloth smuggling is not conclusive evidence of its decline; it is more likely that local customs officials quietly ignored the traffic for there was no pressure from Dublin or London to investigate it. One Cork merchant, itemizing domestic goods that might find sale in New England in 1764, included camblet cloth and detailed the colours and widths available, without any reference to the fact that ships carrying such cargo were liable to confiscation. And Richard Hare, discussing general trade with Madeira in 1771 mentioned to a correspondent that camblets 'are sometimes carried thither and answer well in the purchase of wine' and advertsing to the question of confiscation, added: 'We have little or no danger in our harbour on that account'.

58. Report on trade between Britain and Portugal, 10 March 1767 (P.R.O. S.P./89/64, pp. 146-7). Among a list of British and colonial imports to Vienna in 1773, the deputy British consul included 15,881 yards of 'Irish camblets': 'British imports to and exports from Portugal in 1773' (P.R.O. B.T./6/62, p. 3). For a general reference to the trade from a neutral source, see Mercator’s letters on Portugal and its commerce (London, 1754), p. 18; Portuguese imports from Ireland were given as beef, pork, fish, 'some ordinary camblets', barley and potatoes.


60. Copy, William Conner to [Sir William Abdy], 19 Dec. 1755, Conner letterbook 1748-58, Devonshire MSS (P.R.O.N.I. T3,158).


Less oblique evidence comes from the 1770s and after. All comments on the export trade agreed that it had flourished until 'recently', or more specifically until the mid- or late 'sixties, and that it had then fallen away fairly rapidly. French competition, the deterioration in cloth quality as raw material costs rose, the growth of East India fashions in Portugal, were the various explanations given for this. However with the coming of 'free trade' in 1780 and the end of restrictions on woollen exports a small cloth trade reappeared in the customs ledgers – mainly directed to Portugal (see Append. table xviii). Bandon and Cork manufacturers in the trade stated that their production was at much lower levels than during the clandestine period; in 1783 Bandon had about 250 camblet looms, but according to Robert Stephenson, ex-inspector of the Linen Board (writing in the following year) the town 'has now the appearance of a deserted village compared with its aspect in 1755' at which period he said there had been more than 2,000 looms on camblets. Negotiations in 1781 and 1785 concerning Ireland's place under the Methuen treaty revealed

63. Sir Lucius O'Brien, Dromoland [Co. Clare] to the Earl of Carlyle, 8 April 1781, Bolton MSS (N.L.I. 15,869/2); An address to the representatives of the people ... by a friend to the nation (Dublin, 1771), p. 34; Campbell, Philosophical survey of the south of Ireland, p. 194; Young, Tour, ii, p. 70; evidence of Robert Stephenson before the Grand Committee for trade, 1780, J.H.C.I. X, cccxcxiv; evidence of Henry Hazell before the 'Committee appointed to enquire into the state of the manufactures of this Kingdom', 1784, J.H.C.I. XI, cl - cli; report of John Arbuthnot to the ... Trustees of the Linen and hempen manufactures for Leinster, Munster and Connaught, Nov. 1783 [1783] (hereinafter cited as Arbuthnot's report, 1783), pp. 46-7; ni Chinnéide, 'Frenchman's impression of Cork', (1774), 22.

64. R. Stephenson, Observations on the present state of the linen trade in Ireland ... (Dublin, 1784), p. 36. Cf. evidence of Abraham Lane on Bandon's former industry, 28 Nov. 1821 in Fourth report of the Commissioners of inquiry into the collection and management of the revenue arising in Ireland, H.C. 1822 (634) xiii, pp. 203-4.
further evidence of the long-standing nature of the illegal trade: not only were 'Irish camblets' found to have been one of the few manufactures regularly imported from Ireland, but they had been accorded a specific duty in the Portuguese Book of Rates.  

Whatever the precise dimensions of the camblet manufacture it can never have been as important a source of employment as the related sectors of the local woollen industry - yarn production for the English market and cloth production for home consumption. Yarn-spinning and the preparatory process of scribbling and combing (or carding) wool were of course intrinsic parts of any woollen industry, but what was novel in the case of Cork's yarn trade was the concentration of resources on the specific task of making up a large proportion of Irish wool destined for the English weaver into a state ready for the loom. Until the 1670s nearly all wool transported to England had been shipped in a 'raw' state, but from that decade yarn became a growing fraction of the region's recorded wool exports: in 1686 about 7½% of the 43,000 stones of wool going to England was in the form of yarn. In the 1690s yarn exports accelerated - in spite of the short boom in the cloth industry - and the trend was maintained after 1700: 7,900 stones of woollen and worsted yarn had been exported from the country as a whole in 1696, whereas in 1707 over 58,000 stones of yarn were being sent from Cork and Youghal alone.

65. Copy, Robert Walpole, Lisbon to Lord Hillsborough, 10 Oct. 1781; extract of letter, Walpole, Lisbon to the Marquess of Carmarthen, 26 Feb. 1785, 26 March 1785; memorandum on the Portuguese trade (c. 1783); [copy], depositions of Irish merchants sent by Walpole, Lisbon, 29 Jan. 1785, Bolton MSS (N.L.I. MSS 15,869/4; 15,871/10; 15,842/2; 15,872/4).
The mid-1690s to the mid-1710s were in fact a period of unique growth in the volume of yarn exports; in the subsequent six decades the regional trend was to be essentially cyclical, although in the third quarter of the century exports from Cork reached record heights (see Append. table xviii). The relative importance of woolen yarn fell away gradually, to be quite eclipsed after mid-century by the finer worsted or bay yarn in which the value added at the spinning stage was much greater: in official valuations woolen yarn was often rated at less than double the price of wool, whereas worsted was usually three times the value of the raw material, occasionally much more. During the early years of expansion Cork (assisted by Youghal) controlled over 90% of national yarn exports, and by the 1720s nearly all the wool legally shipped from the region was leaving in the form of yarn. This was a period of falling wool prices when Irish wool exports (and by inference total sheep numbers) were contracting markedly. It is clear that Cork was handling an increasing proportion of a declining trade, not by expanding sheep production in its own hinterland but by consolidating its position as the major source of demand for the wool of other parts of Munster and beyond. It led the way in developing spinning, and even after other regions followed its example in the second quarter of the century, more than half of all yarn exports continued to pass through the port of Cork.

The region's prominence in the yarn trade can be regarded as a logical development from its earlier more narrowly based cloth industry. Before 1699, dealing in yarn for the English market was a form of diversification for cloth manufacturers; after the act it became the central activity. Cloth manufacturers and dealers of the 1680s and 1690s - Cork

merchants such as the Newenhams and the Pikes—concentrated on yarn thereafter. Towns that had been associated with weaving—Tallow, Midleton, Youghal and Mallow—became major putting-out centres. And while some of the weaving families in these towns may have departed, demand for scribblers, carders and combers provided male employment equivalent in economic terms to weaving.

For every comber there were at least twenty spinners. Without the existence of a substantial underemployed female labour force in the countryside, prepared to work at rates significantly below English levels, the expansion of spinning could hardly have been accomplished so quickly. By the 1710s there were probably about 12,000 females in the region employed on a regular basis by 'clothiers', i.e. master-combers. Little skill was required and no capital, for at this stage many were still using the distaff. In 1702 Sir Francis Brewster attributed the recent growth of

69. J. Barclay, ed. Some account of the life of Joseph Pike... (London, 1837), pp. 121-4. For the Newenham association with the cloth trade, see MSS of the House of Lords, iii, p. 108.

70. This estimate is based on a breakdown of Richard Purcell's workforce in 1732—account of houses in Kanturk, and employees of Richard Purcell, Egmont MSS (B.L. Add. MS 46,997*, p.198 [N.L.I. Mic. p4,677]); a ratio of one to fifteen was assumed by Young in 1776 (Young, Tour, ii, p. 19), when presumably spinning productivity (with the general adoption of the spinning wheel) would have been greater.

71. This is a lower-bound estimate, because at no time during the century does it seem that a spinner's annual output would have much exceeded seven great stone of yarn. This is implicit in Stephenson's maximum earnings estimate of 1763, in Hannam's daily output estimate of 1776, and in O'Sullivan's comparison of hand and machine efficiency in 1807: The reports and observations of Robert Stephenson made to the ... Trustees of the linen and hempen manufacturers for the years MDCCCLXII and MDCCCLXIII (Dublin, n.d.)—(hereinafter cited as Stephenson's reports, 1762 and 1763), pp. 32-3; Young, Tour, ii, p. 18; J. O'Sullivan, Cork to [John Foster], 16 July 1807, Foster MSS (P.R.O.N.I. D562/5926). Stephenson suggested that the export trade in worsted yarn employed in the country as a whole somewhat below 40,000 spinners (op. cit.).
spinning in Ireland to the fact that 'before the wars, the Irish had cows ... and whilst they can have milk and potatoes, they will do little work. Now the Irish had [sic] generally lost their cattle, and that forced them to spin to get [them] bread ...'. 72 Certainly spinners were associated with the poorer sections of the rural population, and their earnings (at under 2d. per day) were regarded as being a sufficiently important item of income even in 1707 (when the yarn trade was threatened by English legislation) for Sir Richard Cox to remark that 'we are entirely ruined (especially in county Cork) if the woollen yarn should be prohibited ... it would ... send thousands of families here a-begging, or rather a-starving'. 73

Thus from the beginning of the century, yarn spinning and its export to England became one of the central features of the regional economy. For much of the period it was Cork's single most important export to England, so that fluctuations in the trade could markedly affect the course of exchange on London. 74 A measure of the importance attached to it was the vigorous (and successful) efforts of those with Cork interests in London to protect the trade, first from it being stopped altogether in 1707, then from higher duties in 1711. 75 Initially the West Country lobby reflected the opposition of English master-combers, but a division

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72. Brewster, New essays on trade, p. 96. For reference to girls 'spinning while they walked', see Lord Perceval, Ballymacow to Viscount Perceval, 11 June 1731, Egmont MSS (B.L. Add. MS 46,993*, p. 167 [N.L.I. Mic. p4,677]).

73. Sir Richard Cox to Edward Southwell, 11 Feb. 1706/7, Southwell MSS (B.L. Add. MS 38,154, f. 156 [N.L.I. Mic. p1,048]).


of interest emerged between combers and cloth manufacturers which weakened
the political lobby against Irish yarn. A long-drawn-out campaign in
the 1730s to have the English import duty removed altogether was con-
ducted in London by Bristol and Irish interests, with the Earl of Egmont
being one of the activists; the argument used was that a prosperous yarn
trade would bring all Irish smuggling of wool and cloth to an end, as
well as give English manufacturers a cheaper raw material. The concession
was resisted by the English wool-growers, but in 1739 the duty was lifted.

The distribution of employment in the industry was determined in the
first instance by the earlier location of the cloth manufacture. It fanned
out from the towns which had inherited a supply of artisans and where
master manufacturers resided. Because the raw material was increasingly
obtained from outside the region there was little scope for independent
production by spinners. Activity in a locality was completely dependent
on individual employers: for instance at Kanturk, combing and putting-out
was developed around 1715 by one William Purcell, and some 600 spinners
were employed; the manufacture however fell away almost completely when he
died in 1726, only to be built up again two years later when his brother
Richard entered it. Apart from Bandon and Cork itself, there were at

76. Cf. J. Dunsford, Historical memoirs of the town and parish of Tiverton
(Exeter, 1790), pp. 208–9; 230–2; Youings, Tuckers' Hall, p. 107.

77. Viscount Perceval, Bath to William Taylor, 11 Nov. 1730; Perceval,
London to Taylor, 11, 27 Feb. 1730/1, Egmont MSS (B.L. Add. MSS
46,995*, p. 96; 46,996*, pp. 22, 33 [N.L.I. Mic. p4,677]); Egmont
diary, ii, 12 Feb. 1733/4; Cullen, Anglo-Irish trade, pp. 4,56.

78. John Purcell, Kanturk to Sir John Perceval, 28 April 1713; Baron
Perceval, London to Berkeley Taylor, 25 July 1717; Taylor, Bally-
macow to Viscount Perceval, 4 April 1726; William Taylor, Bally-
macow to Perceval, 12 Feb. 1727/8, 22 Oct. 1728, Egmont MSS (B.L. Add.
MSS 46,979*, p. 731; 46,982*, pp. 103–4; 46,991*, p. 28; 46,993*,
pp. 12, 153 [N.L.I. Mic. p4,674–7]).
least eighteen combing and putting-out centres in the region, most of them north of the Lee, by the third quarter of the century, (see map 9). Most putters-out bought their own wool by contract, some of it in Tipperary, some from further afield. In the third quarter of the century they were buying directly at Midland fairs - at Mullingar and (after 1758) at Ballinasloe, which rapidly became the main wool market for the country in the 'sixties; not surprisingly Cork buyers formed the single most important group there. 79

Although Cork-based dealers did not have exclusive control over wool supply or wool prices, there was a tendency towards the concentration of yarn dealing in a few hands. Richard Newenham, who was reckoned in 1750 the largest dealer in Ireland, employing 'some thousands', 80 was presumably only able to do so by developing a number of putting-out depots; similarly Henry Sadleir who was employing over 6,000 worsted spinners in the early 1780s, delegated combing and putting-out, 81 although combing remained an important city occupation. 82 Two factors brought about the decline of the smaller independent yarn manufacturer; firstly there were supply problems from the 1760s which were partly a result of the general


80. Smith, Cork, i, p. 366.

81. See petition of Henry and James Sadleir, 31 Oct. 1783 in J.H.C.I. XI, 47; Respective reports of John Greer ... and John Arbuthnot ... on Mr Robert Stephenson's schemes (n.p., n.d. [c. 1784]), p. 10.

82. There were said to be 400-500 combers in the city in 1792; Cork Gazette, 72 March 1794.
decline in national sheep numbers, but also arose from the introduction of English breeds of ram which damaged the quality of finer combing and clothing wools. Prices rose sharply and competition for supplies intensified; Newenham for instance was actually giving advances to wool-growers.

In 1772 Ebenizer Pike, a Cork dealer, contrasted the difficulties and narrow profits obtaining then with the situation formerly when 'this trade was good, the great and the small got by it ...'. By that decade wool prices were actually higher than those in England, and only cheaper labour and the good reputation of Irish yarn maintained its competitiveness in the English market. A second reason for the enhanced position of the city dealers lay in their control of yarn shipments. Throughout the century it had been usual even for inland manufacturers to send yarn on commission to factors in the English ports. Prior to 1753 this meant in practice Minehead and Bristol (the centre for yarn brought overland to the Norwich area). Only from that year was direct shipment to London and East Anglia permitted, and thereafter the greater part of south Munster yarn was consigned on Cork account, some of it on Cork-owned ships, to London or Yarmouth to be sold by English factors. The longer sea route (and one

83. See letter on the woollen manufacture in Hibernian Chronicle, 10 Jan. 1780; also, Arbuthnot's report, 1783, pp. 39, 46.
84. Pike, Cork to R. and J. Gurney and co., 18 July 1772, Gurney MS no. 482+.
85. Ibid.
87. The Newenhams certainly owned two vessels for shipping yarn (Jeremiah O'Sullivan, Cork to John Foster, 28 Dec. 1807, Foster MSS (P.R.O.N.I. D562/5932)), and other exporting houses - to judge by newspaper evidence - had at least joint shares in such ships.
on which there was much smaller general traffic) favoured the larger ship-
owing manufacturers. There were five houses describing themselves as
yarn shippers in 1764; most of the yarn that they carried had probably
been manufactured on their own account, or purchased by them from inland
clothiers or city worsted factors. However some of the yarn shipped
remained the property of the smaller manufacturers, but it was probably a
decreasing proportion. In the early 1770s Gurneys, long established as
London and Norwich yarn factors among other things, were experiencing
difficulties in securing regular supplies and sought to maintain direct
contract with smaller manufacturers in such places as Youghal, Castle-
martyr and Castlelyons, and to counter-balance the dominance of the
Newenhams and one or two other houses in Cork. They attempted to provide
shipping facilities from Youghal while retaining their position as factors.
It is doubtful whether they had much success.

The early 1770s mark the beginning of a downward trend in yarn exports,
punctuated by temporary recovery in the mid-eighties, and irretrievable de-
cline in the mid-nineties (see Append. table xviii). At its last high
point in the late 1760s the industry had employed between 15,000 and 20,000
spinners in the region, exclusive of those working for the home market
(perhaps a further 25%). The main spinning areas after mid-century were


89. For references to city worsted factors at this time, see advertisements
in *C.J.*, 30 Jan. 1764; 12 March 1764.

90. Copy, Richard Gurney, Cork to Joseph Pike, 8 Oct. 1770; John Gurney,
Norwich to Richard Gurney, 24 Feb. 1772; Samuel Allin and son, Youghal
to R. and J. Gurney and co., 3 May 1772, Gurney MSS nos. 333, 144, 464.

91. For estimates of the size of the home market in relation to export
demand, see Arbuthnot's report, 1783, p. 46; Young, *Tour*, ii, pp. 68-9.
no longer the more developed districts, but remoter ones such as the Killarney neighbourhood, west Muskerry and parts of west Waterford where labour costs were lower. Throughout the period there were also some wool spinners south of the Lee, notably around Bandon, but probably their main function was to supply Bandon weavers rather than Cork yarn exporters. However the relative unimportance of wool spinning in the well-populated southern districts was the result of specialization in flax spinning and generally more labour-intensive farming systems.

The movement of spinners' wages in real terms seems to have been quite as sluggish over the century as those of male agricultural labourers. Two estimates in 1698, made to underline the cheapness of Irish spinning, put spinners' wages at 7d. per ball, and 6d. per lb. (i.e. 9d. per ball), the latter being a third below English levels. By about 1760 wages in nominal terms appear to have risen by at least a half to 12d. or 13d. per ball. It was said in 1763 that a regularly employed spinner could earn £3 p.a. But the rates deteriorated sharply over the last third of the century: in 1776 9d. per ball was the rate quoted by two Cork master-combers and in 1784 8d. was said to be the Munster rate. Some estimates of average earnings in the 1780s - under 2d. p.a. would

92. Smith, Kerry, p. 75; Young, Tour, ii, p. 68; Arbuthnot's report, 1783, pp. 38-40.
93. MSS of the House of Lords, iii, p. 108. Neither these comments nor the ones in the 1760s are specifically referring to the Cork region.
95. Stephenson's reports, 1762 and 1763, p. 33.
96. Young, Tour, ii, pp. 18, 61.
97. Evidence of Benjamin Haughton before the Committee app. to enquire into the state of manufactures, 1784, J.H.C.I. XI, cxlvii.
98. Letter from 'Planter' in Hibernian Chronicle, 4 March 1779; Arbuthnot's report, 1783, pp. 40, 46; Stephenson, Observations on the linen trade p. 46.
suggest an even lower rate per ball (which usually took three to four working days to spin). Even in 1800 female spinners were said to be still earning only 2d. p.d.\textsuperscript{99}; there was some nominal improvement after that.\textsuperscript{100}

The rise in raw material costs from the 1760s without a compensating rise in yarn prices had forced down the spinners' already depressed wages.\textsuperscript{101}

They were so low by the 'nineties in real terms that the introduction of machine-spinning in England could hardly depress them further; instead exports in hand-spun yarn fell to insignificant levels. Thus the yarn trade which at the beginning of the century 'furnished the poor spinner and comber with daily money to smoke and drink',\textsuperscript{102} was by the 1780s only kept in existence because of the ample supply of 'industrious poor wretches'.\textsuperscript{103}

In the period when yarn exports were in decline, the trade became once again almost exclusively a Cork preserve. By implication spinning survived longer in the Cork region than elsewhere. Arguably this can be explained by the stronger local cloth manufacturing tradition which sustained demand. There remains however the strong possibility, that labour costs in the region were significantly lower than in those parts of Leinster.\textsuperscript{104}

\textsuperscript{99} Hibernian Chronicle, 13 March 1800; cf. Lansdowne, Glanerought, p. 68\textsuperscript{n}.

\textsuperscript{100} Wakefield, Account of Ireland, i, p. 71\textsuperscript{m}.

\textsuperscript{101} Cf. evidence of Abraham Wilkinson before the Grand Committee of trade, 1780, J.H.C.I., X, cccxc\textsuperscript{e}.

\textsuperscript{102} [John Hovell], A discourse on the woollen manufactory of Ireland (Dublin, 1698), p. 11.

\textsuperscript{103} Arbuthnot's report, 1783, p. 40.

\textsuperscript{104} This was suggested by a Leinster manufacturer in 1784: evidence of Benjamin Haughton before the Committee app. to enquire into manufactures, 1784, J.H.C.I. XI, cx\textsuperscript{l}vi.
where spinning had developed after the 1720s. Admittedly relative trends are complicated by the introduction of the hand-spinning of cotton from the 1770s, but there is no reason to suppose that this developed more precociously in Leinster than in south Munster.

Cloth production for the home market formed the third segment of the region's woollen industry. As with all economic activities catering for internal consumption, its pattern of evolution is somewhat obscure; it is doubly difficult to determine trends in production when evidence on the cloth export sector is so imprecise. However it is clear that for most of the period the country population were normally clothed in coarse frieze. Probably every parish had several traditional weavers, members of families long associated with the craft, who would work up the wool handed to them. And on many estates there were manorial tuck mills, usually as adjuncts to grist mills, where all the inhabitants were obliged to have their cloth fulled. The very ubiquity of such mills in most of the region is a pointer to the scale of 'subsistence' cloth production. Towards the end of the period when blue frieze was popular, country cloth was brought to market towns for dyeing.

Frieze, as already noted, was also a market commodity. From the 1750s there was a formal frieze market in Cork city, replacing earlier more casual modes of sale. But there was a considerable demand in town and country for finer, lighter and more varied woollens, for suiting, female fashions and furnishings. This was supplied from three sources: England, Dublin and local manufacturers. Cork imports of English woollens may be a somewhat misleading guide to the actual consumption of cloth from


that quarter, for Dublin wholesale drapers were on occasions intermediaries, at least after 1750. However imports from England, even at national level, were fairly modest for the greater part of the century. Dublin, centre of Irish broad-cloth manufacture, was clearly a more important source for Cork drapers, and in periods when local weavers were unemployed, it was the cars carrying Dublin cloth into the city that journeymen were wont to attack. But the greater part of the region's demand for everything from superfines to coarsest serge was woven locally.

Broad cloth was a very minor element of the export boom in the 1690s, but in the early eighteenth century it developed as one branch of the city-based industry. Until the 1730s it seems to have been carried on 'very extensively and in a very great degree of perfection'. After the 1740s the fall-off in the supply of fine carding wool from Tipperary and the Midlands which followed the introduction there of heavier English rams, weakened the competitiveness of local broad-cloth, as well as bringing to an end the export of non-worsted yarn. Broad-loom weaving by no means disappeared, for a number of city draper/manufacturers continued to produce some fine lines. But employment in this sector, in good times a high-wage one, seems to have become precarious, and broad-cloth weavers were foremost in attacks on imported goods, whether fine woollens and silks from Dublin or England, or chintzes and cottons of East Indies origin or

107. E.g. C.E.P., 29 June 1767, 20 Aug. 1770.
108. But see Maury, Fontaine, p. 169.
109. C.E.P., 3 August 1769.
110. See above p. 562, n. 83.
111. See advertisements by Edward Barrett (Cork Journal, 18 Nov. 1756), Joseph Harman (C.J., 12 March 1764); widow of A. Johnston (C.J., 21 June 1764); 'clothiers of Cork' (Hibernian Chronicle, 20 Aug. 1770).
inspiration, and indeed some of the animosity against local linen weavers presumably came from the same source. During the general non-importation agitation in 1778-9, the most vocal local appeals came from 'some hundreds of broad-cloth manufacturers'; as elsewhere the movement was temporarily quite effective, for it was followed up by the establishment of a public woollen warehouse in the city with subscribed capital of £4,000 to provide wool (on a non-profit-making basis) and to guarantee a market for weavers of 'broad cloths, coatings and napped cloths'.

And in the depression of 1783-4, broad-cloth weavers were first in the textile trades to be affected; they were prominent in a massive riot at a wholesale auction of English cloth. But difficulties in this sector should not be exaggerated; imports of English old draperies to Cork were running at under 60,000 yards p.a. until the mid-nineties, and as Cork's proportion of national imports was not changing noticeably, there can have been no significant extension of hidden imports channelled via Dublin. Some master manufacturers were importing small amounts of Spanish wool at this time, and one or two were quick to follow English textile innovations, notably Robert Kemp, an established manufacturer who with great publicity imported wool-preparing and cloth-printing machinery as part of an integrated 'superfine manufactory' into the city c. 1791; after seven years

114. See Hibernian Chronicle, 2 April 1778.
in production he went bankrupt and retired into ironmongery. English imports were rising sharply in the nineties; it is hardly surprising that with the fairly limited local market, an inadequate domestic raw material supply and (because of its urban location) no relative advantage in labour costs, this branch of the industry was all but gone by the end of the century.

The number of broad looms had probably at no time exceeded five hundred; the new-draperies branch, that producing worsted cloth, was always on a much larger scale. And while Cork and Bandon were the centres of employment it was not unknown for master-combers in other putting-out towns to diversify into worsted cloth manufacture and set up a few looms to produce camblet, other stuffs, shalloons and serges sometimes of a coarseness approaching 'peasant' frieze. It seems likely that a majority of worsted weavers before the 1760s were working for the illegal export market; by the 1770s local narrow looms were only working up about one-quarter of the yarn spun in the region, i.e. about 15-20,000 stone (of


118. It did not however totally disappear, for one or two Cork and Fermoy manufacturers were regular purchasers of Irish fine wool at a time when its revival was being encouraged: M.F.M., iii (1813-4), 259-61.


120. A statement by the Lord Lieutenant on a visit to the south in 1769 that 3,800 looms 'have within a very few years fallen into disuse at Cork and its neighbourhood ... which were worked only for home consumption' is hardly credible: Lord Townshend to Viscount Weymouth, 13 Sept 1769 in Cal. Home Office papers, 1766-9, no. 1283. If the remark is taken to be an exaggerated reference to the decline of camblet looms working for the Portuguese market, it becomes more plausible. In 1807 Jeremiah O'Sullivan spoke of how 1,100 looms had been kept at work in one city parish alone fifty years previously, on 'stuffs, camblets, calamancoes, serges and the like for the Spanish and Portuguese markets': O'Sullivan, Cork to John Foster, 25 May 1807, Foster MSS (P.R.O.N.I. D562/5925).

121. Young, Tour, ii, pp. 62, 69. For a lower local estimate of home consumption, see ibid. p. 18.
yarn), enough to produce 20-27,000 pieces of narrow stuff and keep over 1,500 looms tolerably employed. \(^{122}\) Worsted weavers were much less vulnerable to Dublin and English imports, and unemployment was more frequently the result of a fall in home demand during seasons of low agricultural prices, poor harvests or high cattle mortality. Local worsted sales were affected in 1767, 1772 and 1784, \(^{123}\) and although imports of English new draperies were blamed for these difficulties internal market conditions were clearly more decisive. \(^{124}\) Imports to Cork (in terms of value) were running at much lower levels than those of broad cloth, only exceeding 100,000 yards briefly in the late 'seventies. After that period, or at least from the 1790s, production for the home market expanded gradually. This was less because of import substitution than the growth of aggregate demand from an expanding population. \(^{125}\) Also, the old dependence on home-produced frieze was weakening; farmers' families seem to have begun to wear 'shop' worsted, as well as of course cotton cloth. The decline of sheep on small holdings was less important a factor than the increase in the disposable income of the farming class. Seasons when grain prices were high were regarded as good omens for the manufacturer. \(^{126}\)

\(^{122}\) It is assumed that a weaver made about sixteen pieces p.a.: Young, Tour, ii, pp. 18-9.

\(^{123}\) C.E.P., \(^{22}\), 25 June 1767; Hibernian Chronicle, 2 Jan. 1772, 31 May 1784; evidence of Henry Hazell before the Committee app. to enquire into ... manufactures, 1784, J.H.C.I. XI, cl.

\(^{124}\) Evidence of Henry Bagnell before the Committee app. to enquire into ... manufactures, 1784, J.H.C.I. XI, cli.

\(^{125}\) Cf. Newenham, Population of Ireland, p. 205.

\(^{126}\) See editorial comment in C.E.P., 9 Nov 1789.
The older form of organization in which several dozen master-manufacturers in Cork and Bandon handled most of the trade gave way to one in which a small number of capitalized firms introduced elements of the new textile technology. Midleton factory built about 1794 by Marcus Lynch, a city merchant (apparently with no previous knowledge of the wool trade) was the most abrupt departure from the traditional methods. It was designed to produce £60,000 worth of new and old draperies p.a. and to employ on the site over 1,100, half of them children. The estimate of fixed capital required for mill, loom shops and machinery for dressing the cloth was originally put at £8,500, but in fact nearly £20,000 was spent. Cloth was sold in Cork and Dublin, and the very small imports of English new draperies to Cork in the late 1790s suggest that its local impact was considerable. However there were liquidity problems from the beginning, and extra partners were sought without success, both inside the region and in England. Lynch was lucky to avoid bankruptcy, for in 1803 the government, apparently through the mediation of Viscount Midleton, purchased the premises for £25,000 for use as barracks.

There were other large-scale ventures which had greater success. The Lane family, associated with the yarn export trade and cloth manufacture since the seventeenth century, began to specialize in the weaving under contract of Irish army clothing in the early 1770s (some of it broad cloth), and they developed a near monopoly in this highly


128. Joseph Haynes, Cloyne to the Bishop of Kilmore, 1 July 1801, 27 Jan. 1803, Midleton MSS (N.I. I. MS 8867/3; 7); Beaufort, Travels 1806-7, ii(1), pp. 70-1; C.E.P., 8 Jan. 1795; Stevenson, Delatocnaye, p.80; Townsend, Cork, pp. 626-7; Dickson, 'Lynch'.

129. Young, Tour, ii, p. 69.
valuable market during the French wars. During the first decade of the new century they built water-spinning and cloth-dressing machinery at their Riverstown mills east of the city; in these processes and in their city loom-shops they were employing about 1,000; in some of the war years they brought in between £30,000 and £50,000 of wool. Mahonys, another family long engaged in city manufacturing, although on a much smaller scale than the Lanes, moved into large-scale production in the 1790s in the northern suburbs of the city. They began to trade as the 'Cork Stuff Manufactory' at the end of the decade, with a fairly modest joint stock of £6,150.

These firms, with one or two others, were qualitatively different from the old artisan manufacture. The orientation remained towards the domestic market, but one that stretched beyond south Munster, for the city was becoming the most important worsted manufacturing centre in the country by the early 1800s. It was consuming between a half and two-thirds of the total national supply of combing wool.

Another branch of the woollen manufacture that thrived on sales outside the region was the stocking industry. There was a small city hosiery trade where woollen and worsted stockings were woven on frames, but of much greater importance was a domestic knitted-stocking manufacture that


132. Martin and Timothy Mahony, Cork to Jeremiah O'Sullivan, 15 June 1807; O'Sullivan, Cork to [John Foster], 28 Dec. 1807, Foster MSS (P.R.O.N.I. D207/702; D562/5932).
was largely confined to the barony of Barretts, north of Blarney. By the 1770s great quantities of Barretts stockings were sold at Blarney market—one estimate valued sales at £100 per week—and even Ulster buyers were involved.\textsuperscript{133} It is unclear how independent the female knitters were in this enterprise; on the small upland holdings in the barony sheep probably survived in some numbers, so that little putting-out of the raw material may have been necessary. In 1776 Blarney's landlord took the initiative and settled thirty English hosiers equipped with twenty frames in the village to encourage new production methods.\textsuperscript{134} The manufacture continued on a dual basis for several decades, but by 1806 the woven stockings of the male hosiers were no longer being manufactured—when Ulster dealers were still resorting to the market for the knitted product.\textsuperscript{135}

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After 1699 landlords rarely encouraged the woollen industry on their estates, and in the few cases where they did it was because the combing and putting-out of work was already well established.\textsuperscript{136} Most landlords regarded the development of the woollen industry as a far less promising and less satisfactory mode of improving an estate than the linen industry: there was the 'patriotic' commitment felt by many landowners to realize linen's potential as the staple manufacture of Ireland; this sentiment predated the English commercial legislation of the 1690s, but it was undoubtedly strengthened by the Woollen Act. And from 1711 with establishment of the Linen Board, there existed the prospect of concrete public support for private endeavours on a far more lavish scale than

\textsuperscript{133} Mockler's 'Mallow in 1775', 26; Young, Tour, ii, p. 70.
\textsuperscript{134} Young, Tour, ii, p. 34; Hibernian Chronicle, 28 Nov. 1782.
\textsuperscript{135} Beaufort, Travels 1806-7, ii(2), p. 42.
\textsuperscript{136} E.g. at Killarney (see advertisement in Cork Journal, 11 Nov. 1754) and at Millstreet (advertisement in C.J., 21 Aug. 1760).
anything the Dublin Society, as patron of the woollen industry, was to offer. Furthermore linen manufacture was seen as a more effective method of raising the incomes of the poor than the woollen industry, not least because every labourer could supply the raw material. Underpinning these factors was the assumption that the development of linen was one of the most promising ways of raising land values. By the 1720s the diffusion of an export-orientated trade in Ulster seemed to increase the chances of successful emulation elsewhere. Some felt that the easiest means to achieve this was to settle groups of Ulster artisans on an estate, and such a policy of transplantation had the added attraction that northern immigrants would most likely be Protestant.

Linen manufacture of sorts was common enough in the region before 1700, but the cloth manufactured was a coarse fabric hardly more than a foot wide known as 'bandle' linen, the raw material for which was locally spun. Bandle weavers, like those of frieze, were a traditional rural phenomenon. But there was no external demand for bandle linen - unlike frieze - and for most of the period its continued manufacture was regarded as positively subverting attempts to develop an export trade. In contrast, the culture of flax that went with it, was seen as a foundation on which to develop commercial linen production. In the course of the century there was some gesture to encourage the latter type of linen manufacture on almost every major estate in the region, even where the owner was an absentee. In some cases this amounted to no more than the distribution of spinning wheels or flaxseed, but there were about twenty tangible linen enterprises over the region where landlords were responsible for establishing weavers, spinning schools, regulated yarn and/or linen markets, or bleaching facilities (see map 9).
The first approach, the settlement of weavers, could involve no more than the placement of a few men to work up local flax. Even in 1731 most yarn in Co. Cork was said to be woven 'in private homes, every gentleman being fond of having a piece or two of linen cloth of his own manufacturing ...'. But more ambitious projects were usually initiated when a landlord arranged a contract with an 'undertaker', i.e. a manager, generally a person already associated with linen. This could either take the form of a favourable lease of land for weavers' houses, loom-shops and perhaps a bleach-yard, in which the landlord might agree to help in the provision of looms or bleaching utensils, in return for the undertaker covenanting to settle or train an agreed number of weavers; or it could be an actual partnership between landlord and undertaker in which the responsibility for building up and managing the manufacture rested with the latter. Such undertakers and the weavers they attracted came from a variety of backgrounds, English, Huguenot, Connaught Catholic.

137. Copy, Lord Perceval, Cork to Viscount Perceval, 2 July 1731, Egmont MSS (B.L. Add. MS 46,996*, p. 171 [N.L.I. Mic. p4,677]).


139. The best documented case of Huguenot involvement locally is that at Irishannon: Reports and observations of Robert Stephenson made to the ... Trustees of the linen manufacture for the years ... 1760, and 1761... (Dublin, 1762) - hereafter cited as Stephenson's reports, 1760 and 1761 - p. 36; F. Ebrington Ball, 'Thomas Adderley of Inishannon', in J.C.H.A.S., 2nd ser. iii (1897), 55-6.

140. P. Mally was the 'undertaker' at the Annagh manufactory for over ten years; for a suggestion of his Connaught origins, see William Taylor, Dublin to the Earl of Egmont, 15 March 1735/6, Egmont MSS (B.L. Add. MS 47,001*, p. 39 [N.L.I. Mic. p4,678]).
and Ulster Protestant, the last being much the most important source, especially during the middle decades of the century; Ulster weavers formed a majority of the industrial population at the landlord-sponsored 'manufactories' at Dunmanway, Innishannon and Killarney. The preference for Ulster Protestants was of course partly inspired by non-economic motives, but as even Viscount Kenmare, a Catholic landowner, followed the policy, these should not be exaggerated. The uppermost consideration was probably that put forward by one advocate of their introduction in the 1730s, simply that they would set an example 'to a people that seem to have an aversion to a trade that will keep them constantly employed,... and [they will] by degrees steal them into it'. The manufactories set up on this basis were brittle creations. Imported artisans, however attractive their leases, were 'very apt to ramble', undertakers prone to embezzle and default on their obligations, and the impetus behind individual settlements was often lost on the death or departure of the original promoter.

141. For Dunmanway, see Cox's letter to Prior, pp. 15, 37-8; Robert Stephenson, An inquiry into the state and progress of the linen manufacture of Ireland (Dublin, 1757) — hereafter cited as Stephenson, Inquiry — p. 189. For Inishannon, see above footnote 139. For Killarney, see Lord Chief Justice Willis' letter from Munster, c. 1759, p. 47 (B.L. Add. MS 29,252).

142. This is implied by the casual comment made by Earl Grandison, hoping for good Sunday weather that 'will not prevent my appearing at church with my weavers'; this was shortly after his manufactory had been established: copy, Grandison, Dromana to Aland Mason, 30 April 1757, Villiers Stuart MSS C/II.


144. Ibid. Cf. Stephenson's reports, 1760 and 1761, pp. 26, 35.

145. The latter was the case at Dunmanway, Villerstown and New Grove. Dunmanway survived in a very reduced state to be revived in the 1790s by another generation.
The second way for landlords to encourage the industry was more basic: to popularize flax cultivation, to improve the methods of dressing it and to extend employment in spinning. This became necessary because, widespread as flax-growing may traditionally have been, local supplies in most districts where weaving enterprises were set up, were quite inadequate. There was a surplus in Carbery by the second quarter of the century, but the most important source for yarn supplies until late in the century was 'Connaught' (probably Co. Mayo). Yarn together with coarse linen was regularly brought south for sale in Cork and at fairs in the region; how this relationship with yarn and cloth dealers from a backward region over 170 miles away grew up is unclear. The Linen Act of 1666 had obliged tenants to plant flax on a sixtieth part of all tilled land, but although this legislation may have encouraged individual cloth-making ventures such as the Earl of Orrery's at Charleville, it had no general effect on flax cultivation. By contrast, the schemes promoted by the Linen Board did help to diffuse the crop in the early eighteenth century; (similar attempts to spread hemp cultivation in Munster had no success except in north Co. Limerick). It was assumed that to extend the acreage and improve the quality of the fibre, domestically harvested seed would have to be augmented by imports; the Linen Board performed an important early function in subsidizing this trade and distributing seed


147. 18 and 19 Charles II, c.9.

at reduced rates: in 1732 for instance, seventeen co. Cork applicants obtained nearly 500 bushels of seed from the Board; some landowners such as Sir Richard Cox at Dunmanway and the Knight of Kerry at Dingle went on to import on their own account. Imported seed seems to have been handed out free to begin with, to smaller tenants and labourers on condition that they themselves cultivated it.

Spinning was promoted in two ways: through the distribution of spinning wheels and reels, and by the establishment of spinning schools. Yarn for bandle cloth had it seems been normally spun with the distaff, although wheels were not unknown in the seventeenth century; from the 1720s a wheel subsidy given by the Linen Board greatly assisted in the diffusion of a Dutch-type low wheel. For many years the practice was for the Board to pay at least half the cost of wheels (and reels), which were constructed locally to a standard design. Wheels, costing about five shillings each, 'the poor never will be able to purchase', so their distribution on an estate was usually without charge. Some of them, as detractors of the scheme claimed, may indeed have been disposed of as firewood by unwilling spinners or unofficially adapted for worsted spinning,

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151. W. Harris], Remarks on ... England and Ireland, p. 71.


but as long as there was a local demand for surplus linen yarn, many were used as they were intended.

Spinning schools evolved out of the private charity schools, where elementary education and an element of proselytizing were blended with 'industrious' employment - in practice spinning linen yarn. Although the initial construction costs of charity schools and the master's salary seem to have been usually borne by local landowners, Protestant ministers, parish vestries or voluntary subscription, the cost of clothing and maintaining the inmates was in a number of cases to be met by the sale of yarn. In 1721 there were about twenty-six of these schools, in operation or being built, in the region outside the city. They were later supplemented and in some instances superannuated by 'spinning schools' as such, which the Linen Board encouraged intermittently between the 1720s and the 1750s. The latter were designed specifically to familiarize girls from poor families with the dressing of flax and spinning of fine yarn, and grants were made towards the mistress' salary; whether there was much general education is doubtful. In 1751 there were seventeen spinning schools in co. Cork, twelve in co. Kerry, their location being obviously determined by private application to the Board; most were close to weaving settlements.

154. Methods of erecting, supporting and governing charity schools ..., 3rd ed. (Dublin, 1721), pp. 16-7; 20; 38-41.


156. Stephenson, Inquiry, p. 197.
The third approach adopted by landlords was to promote the development of yarn and cloth markets, and to provide bleaching facilities. The major argument in Cox's famous pamphlet of 1749 was the importance of emancipating spinners and weavers from wage dependence, and of helping them to work for a regular open market. He described the evolution of his own policy over the previous fourteen years at Dunmanway: after first expanding local flax culture he had employed a northern undertaker with responsibilities for having it spun and woven; after the latter had gone off, weavers in the neighbourhood continued as employees of 'private families', until Cox created a market for them to buy supplies and sell their unbleached cloth, assisted by advances which he made and various premia he awarded. Cox's methods were copied by, among others, Viscount Doneraile who operated a market in the 1760s; this was established after a bleach-green had been functioning for some years. Similarly at Clonakilty from the 1760s the Earl of Shannon encouraged the yarn and cloth market with premia; his most important gesture was funding the construction of a public bleach-green outside the town. Other such greens built and maintained by their landlords (or leased out) were at Ballinascarty (on the Strawell estate), Rosscarbery (on Beamish property) and near Cloyne (on the Longfield estate).


158. Stephenson, Inquiry, p. 183; Stephenson's reports, 1760 and 1761, p.37.

159. Reports and observations of Robert Stephenson made to the ... Trustees of the linen manufacture for the years ... 1764 and 1765 ... (Dublin, 1766) - hereafter cited as Stephenson's reports, 1764 and 1765 - pp. 16-7, 94: Minutes of the ... Trustees of the linen and hempen manufactures - hereafter cited as Linen Board minutes - 1794, p. 15.

160. Young, Tour, ii, p. 53; Townsend, Cork, p. 318.

161. Stephenson's reports, 1760 and 1761, pp. 35-6; Stephenson's reports, 1764 and 1765, p. 17; Young, Tour, ii, p. 64; Hibernian Chronicle, 3 March 1774, 26 Feb. 1778; Townsend, Cork, p. 318.
**Table 7:i**

**ESTIMATES OF INVESTMENT AND OUTPUT OF LINEN MANUFACTORIES**

<table>
<thead>
<tr>
<th>Site</th>
<th>Landed promoter/s</th>
<th>Year/s of estimate</th>
<th>Annual value of cloth output</th>
<th>Capital invested (incl. housing and stock-in-trade)</th>
<th>Number of looms at site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroom</td>
<td>Francis Bernard and others</td>
<td>1719-24</td>
<td>£1,478</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annagh</td>
<td>Large partnership including Viscount Perceval and Berkeley Taylor</td>
<td>1729-31</td>
<td>£1,000</td>
<td>e. £1,250 (about one-third fixed)</td>
<td>23</td>
</tr>
<tr>
<td>Dunmanway</td>
<td>Sir Richard Cox</td>
<td>1746-50</td>
<td>£1,325*</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inishannon</td>
<td>Thomas Adderley</td>
<td>1749-55</td>
<td>£2,756</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Villierstown</td>
<td>Earl Grandison</td>
<td>1763</td>
<td>£2,652</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1766</td>
<td></td>
<td>£3,000 (fixed)</td>
<td></td>
</tr>
<tr>
<td>New Grove</td>
<td>Robert Gordon</td>
<td>1766-70</td>
<td>£1,200 (fixed)</td>
<td></td>
<td>?30</td>
</tr>
</tbody>
</table>

* Dunmanway production figures relate to independent weavers


Nearly all the integrated linen manufactories established or inspired by landowners grew up between the 1710s and the 1770s, after which time landed industrial preferences switched to other areas of investment. In their time they were the most important form of productive spending by landlords, even if the relatively high rate of failure makes it doubtful whether this type of spending was necessarily the most enlightened type of 'improvement'. Even the manufacture at Villierstown, which Grandison's
agent calculated made a profit of 11.5% in 1763, \(^{162}\) declined into near oblivion three years later on his death.

A negative judgement is valid however only on those ventures sited north and east of the Lee. As can be seen from the distribution pattern (Map 9) more than half the manufactories and markets in the region - the linen enterprises around the city excluded - are to be found either inside or within a few miles of two small areas of coastal Cork and Kerry where at the end of the century flax was being grown on the great majority of agricultural holdings. In these areas alone did manufacturing activity become widespread and enduring, lasting well into the pre-Famine period.

There is no immediately satisfying explanation for this pattern of specialization. Admittedly some of the earliest linen projects by landowners were in these areas (notably those of the Townsends in the 16Skibbereen neighbourhood in the 1720s and 1730s)\(^ {163}\) but even in 1731, prior to most of the landed schemes, west Cork was noted as one area which 'pays great part of its rents' by flax. \(^ {164}\) In 1759 Cox claimed that flax culture and the art of spinning only spread into the district within the previous forty years, being diffused from Cape Clear island - 'how it came there, I never could learn'. \(^ {165}\) Flax cannot have been totally absent from

\(^{162}\) Christopher Musgrave, Tourin to Earl Grandison, 29 Jan. 1764 Villiers Stuart C/15. 'Profit' here was understood as the profit on sales. If the (rounded) 1766 estimate of assets at Villierstown is used to calculate the return on capital, the figure for 1763 would be 10.2% (see Table 7:i).

\(^{163}\) Precedents and abstracts from the journals of the Trustees of the linen and hempen manufactures of Ireland to 25 March 1737 (Dublin, 1784), pp. 83-4, 116, 121; Smith, Cork, i, p. 272.

\(^{164}\) Copy, Lord Perceval, Cork to Viscount Perceval, 2 July 1731, Egmont MSS (B.L. Add. MS 46,996*, p. 171 [N.L.I. Mic. p.4,677]).

\(^{165}\) Cox's letter to the High Sheriff, pp. 15-6.
Carbery before the 1720s, but it is possible that the requirements of the local fishery for nets would have caused more intensive flax cultivation and yarn production on the south-west islands than on the mainland; western Corkaguiny, the centre of Kerry flax-growing, also had traditional links with fishing. The continuing importance of tillage in the farming systems of both these flax areas must also be considered as a factor, although the areas where flax was sown intensively only formed part of the tillage districts. Such a pattern of agriculture implied a relatively high population; was this then another instance of domestic industry developing in an area of abundant labour? Hardly, if population density was the result of the greater employment offered by intensive agriculture. However flax cultivation was a separate activity from cloth manufacture in these districts: as agriculture had developed and holding size fallen, the labour-intensive flax crop became established in most corn-and-potato rotations; the spinning of it became a winter and spring occupation for the underemployed females and children of the household. The yarn was then sold in the weekly markets at Skibbereen and Clonakilty, or bought by 'numberless ... people who ride round the country, buy [it] up at the spinners' cabins, and carry it by horse-loads into merchants' warehouses'. Such merchants were local master-manufacturers who employed from two or three looms to several dozen in the parishes around Clonakilty, Rosscarbery and Bandon; yarn was also bought for the manufactories elsewhere in the region, and for the Cork city industry. Landed intervention in these districts, while clearly not the cause of the manufacture's growth, stimulated the process, whether by their periodic distribution of flaxseed

166. For a comment on Cape Clear fishing, see Smith, Cork, i, p. 289.
and spinning wheels, by the provision of market facilities and premia to
sellers and buyers, or by establishing their own ephemeral manufactories
which for a decade or two would raise the level of demand for yarn; such
manufactories might decline, as Cox's Dunmanway one did from the 1760s,
but their existence was of strategic local importance. Nevertheless the
opposition of Cox and other promoters to bandle weaving, their preference
for finer cloth in imitation of Ulster fabrics, and their support of the
statute of 1763 prohibiting the sale at public markets of narrow linens
(under twenty-six inches), \(^{168}\) did not assist the development of the weaving
branch, which ultimately thrived by producing modifications of bandle cloth —
slightly broader than the traditional width — such as vitry, dowlas, 'box
and trip' and ticken.

The growth of the industry in Carbery and Corkaguiny is graphically
demonstrated by estimates of yarn and cloth sales at Clonakilty and Dingle.
In 1750 yarn sales at the weekly market at Clonakilty were said to average
£20; in 1776 the figure was put at £100; by implication the weekly figure
c. 1816 was about £350. \(^{169}\) Cloth sales at the town's fairs and markets
were put at £1,800 p.a. in 1776, £18,200 in 1817. \(^{170}\) Total cloth sales
at co. Cork markets were estimated at £10,000 in 1770, whereas in 1817
cloth sales at Clonakilty, Bandon and Cork city were put at £44,200 (about
95% of the county total). \(^{171}\) At Dingle where the organization of the

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168. Stephenson, Inquiry, pp. 181-2; Stephenson's reports, 1764 and 1765
pp. 15, 17-8.

169. Smith, Cork, i, p. 259; Young, Tour, ii, p. 53; Minutes of the
Trustees of the linen and hempen manufactures of Ireland, containing
the report of a tour of inspection through the provinces of Leinster,
Munster and Connaught by Mr Peter Besnard ... in ... 1817 (Dublin,
1817) — hereafter cited as Besnard's report; 1817 — p. 71; Mason,
Parochial survey, ii, p. 316.


171. Hibernian Chronicle, 29 July 1773; Besnard's report, 1817, append.
pp. 24-30. Besnard's sales figures exclude cloth that was sold
outside open markets.
manufacture was somewhat different, a regular yarn market did not exist as at Clonakilty and Skibereen, and the only cloth sold openly came from the narrow looms of bandle weavers outside the town; the annual value of this was estimated at £22,540 in 1800.\textsuperscript{172} In the town itself, weaving of three-quarter-yard-wide cloth had been organized by the Knight of Kerry and members of the Rice family in the 1760s; in 1763 output of such cloth was put at £650 p.a.; in 1800 annual sales of cloth of this width, woven in the town on the account of local employers, was put at £33,908.\textsuperscript{173}

Exports of linen from Cork rose sharply between the end of the American war and mid-1790s (see Append. table xix). Some of the cloth shipped for colonial markets no doubt originated elsewhere in the country, but as much the greater part of exports was sent to Britain, export trends can be taken as a reasonable pointer to regional output. The spurt in the 1780s came as British demand widened for the types of cheap linen produced in the region, even for the coarsest cloths which were used for packaging a variety of goods, in particular sacking for the corn trade.\textsuperscript{174} Exports peaked in the mid-nineties, but during the wars there was considerable official demand for local linen suitable for navy slops and army shirting,\textsuperscript{175} a trade unlikely to have been fully recorded in the export figures. Much of the coarse cloth leaving the region was despatched without being properly bleached; yarn was lightly limed by the spinner before sale (or in some cases dyed) - and cloth might be calendared before export - but the bleach-greens that were still in business towards the end of the period were whitening cloth for the home market.

\textsuperscript{172} O'Brien's survey' (1969), 127.
\textsuperscript{173} Stephenson's reports, 1762 and 1763, pp. 50-1; 'O'Brien's survey', (1969), 123, 126-7.
\textsuperscript{174} See editorial comment in C.E.P., 9 Nov. 1789.
\textsuperscript{175} Besnard's report, 1817, p. 34.
Before the period of rapid growth, most exported cloth originating in the western linen districts appears to have been woven around Bandon. The town was never itself inside the flax-cultivating district, but dowlas was being made in the town as early as 1723, and two families of drapers based in the town, the Wheelers and the Dowdens, became the chief purchasers of western yarn and independently woven cloth: in 1761 the two houses between them in part manufactured, in part bought in some 163,000 yards of coarse linen, most of which was exported on their own account to London. For several decades they were employing a few hundred looms, probably attracting former camblet weavers into the manufacture; after combinations broke their organization, they remained as the largest buyers into the 1810s. Similar dealers - Bandon spirit merchants, Dingle shop-keepers, Rosscarbery grocers - became employers of looms as 'the manufacture became an object of speculation' during several decades of buoyant sales. The total number of looms employed in Bandon, Carbery and Corkaguiny at the end of the period on bandle and export linen was probably around 2,000. It was estimated then that between 20,000 and 30,000 households in Carbery alone were growing flax for the manufacture.

176. Precedents and abstracts of the Trustees journals, p. 121.
178. [John Arbuthnot], [Report] to the ... Trustees of the linen and hempen manufactures (Dublin, 1788) - hereafter cited as Arbuthnot's report, 1788 - p. 5; Besnard's report, 1817, p. 36.
180. Cf. Newenham, Circumstances of Ireland, append, p. 31; Radcliff, Agriculture of Kerry, p. 169; Besnard's report, 1817, p. 36.
181. Besnard's report, 1817, p. 34. Flax acreage in Carbery had probably not greatly expanded from its level of the 1780s: cf. Respective report of Greer and Arbuthnot, 1784, p. 30; Proceedings of the Linen Board, 1813, append, p. 51. It is doubtful whether the west Cork acreage ever exceeded 5,000 acres (stat.).
Quite distinct from the linen industry in the west of the region was the city manufacture. There were two branches of this, dissimilar in their respective modes of organization and the markets for which they produced: the sail-cloth factories, and the small goods trade.

From its inception in the 1710s, commercial sail-cloth manufacture was vertically integrated and fairly capital intensive. Hemp, the preferred raw material for most of the period, had to be imported either from the Continent, or at least from north co. Limerick. More sophisticated tools and machinery were required for dressing it than was the case in flax; water-power was being used for this before mid-century at one site. And sail-cloth looms were larger than those for household cloth.

Export merchants were closely associated with the industry in its early stages. Edward Hoare jun. introduced the manufacture to the city around 1717, and also at that time several city merchants became involved in a manufactory at Rathkeale, co. Limerick. The largest early venture was that established near the city by William Delahoyde, merchant and ship-owner, in the 1730s; it included sixty-eight looms in eighteen loom-houses, and factory plant and stock were together valued at £4,432 in 1740. Linen Board encouragement was a factor in timing the launching of the industry - between 1722 and 1727 Hoare received over £1,000 in bounties - but sail-cloth manufacture was a logical diversification for a provisioning port and victualling centre. However the Douglas factory

182. Smith, Cork, i, p. 365.

183. Precedents and abstracts of the Trustees' journals, pp. 23, 26, 29, 44, 46, 54.


185. Precedents and abstracts of the Trustees' journals, p. 121.
in the south liberties, established in 1726 by a local partnership who settled a colony of Ulster weavers, grew to become by the 1740s a major industrial enterprise on the strength of an export trade to England (and it was helped by an export bounty from 1745). In the 'forties annual sail-cloth output averaged 75,322 yards, worth about £5,000, over 70% of this going to England; the factory was thus responsible for about two-fifths of Cork's total linen exports at this time. It had grown from forty to 100 looms, and in 1749 over 100,000 yards was produced. About 250 operatives were employed at Douglas village, 500 spinners outside it. A retaliatory British bounty on exports to Ireland in 1750 led to a 50% fall in production at Douglas, but after a change of ownership in the early 'sixties and further investment by its new partners (Daniel Perdriau, John Cossart and Julius Besnand, all of Huguenot origin), output returned to about the 1749 level, and was subsequently maintained largely on the strength of domestic sales and British naval purchases (although dependence on foreign raw material - Russian hemp by the latter part of the century - meant that the manufacture was vulnerable to supply problems in wartime). In the third quarter of the century, apart from the

186. The identity of the full set of initial partners has not been traced; in 1738 they were described as Messrs Wakely, Berry [Pery] and co. (see advert. by George Wallis jun, The Medley, 20 April 1738), but one Boyle Davies was apparently associated with it in 1732 (Davies, Donnybrook to Mr Bellingham, 13 March 1731/2, Kinsale manorial papers, vii). In 1755, the partners were described as Messrs Pery, Carleton and co. (Stephenson, Inquiry, p. 182).


Douglas factory, a concern in the city was built up by Francis Price which was similarly integrated, with hemp-mill, Dutch looms and bleach-green, but it appears to have closed on his death. 190

After the American war the local market for sail-cloth was largely captured by British producers, but American and Caribbean outlets were developed by the Douglas proprietors. 191 During the French wars British imports did not disappear, but official demand at Cork was sufficiently strong to lead not only to expansion at Douglas, but to the creation of several other sail-cloth works around the city and at Blarney (all, it seems, forced to use Irish flax rather than foreign hemp). 192 The Besnards, outright owners of the Douglas factory from about 1783, were the first to spin flax by water (from about 1801), 193 and besides operating two spinning mills, the family became involved in the production of cordage at Douglas. 194 But even in the later years of the wars the number of looms there on sail-cloth (100), the total workforce, excluding those making cordage, (300), and the cloth yardage (about 115,000) were little different from the mid-eighteenth-century totals. 195

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190. Stephenson's reports, 1760 and 1761, p. 37; Stephenson's reports, 1764 and 1765, p. 18; C.E.P., 30 May 1771.


Sail-cloth manufacture had not developed elsewhere in Ireland; its survival around Cork throughout the eighteenth century was not because of any local supply advantage. With raw material imported, war years apart, and markets which were either external or official, it was an isolated instance of advanced industrial organization which had few multiplier effects. By contrast the other urban branch of linen, the small goods trade, was an important precursor of the region's factory cotton industry.

For most of the century the weaving of narrow check linens and handkerchiefs had been organized on lines similar to the city worsted manufacture: there were a number of small masters - thirteen in 1757196 - who bought yarn in the city and employed journeymen weavers; several also owned bleach-greens on the outskirts of the city. Formal relations with the rural manufactories were few, but there was considerable cross-movement of skilled personnel.197 A number of the masters were also drapers and importers of Ulster and printed Dublin linens; there was thus little encouragement for finer broad-loom weaving.198 Local specialization from mid-century took the form of 'mixed goods', i.e. cloths using imported cotton-wool as weft. This seems to have spread from Adderley's Inishannon manufactory where dimities and 'figured cottons' - for furnishings and gowns - were being woven from the early 1750s, when several dozen French


197. The Curry family (probably of northern origin) were an example: Albert Curry was a prominent manufacturer in the city (e.g. advert. in Cork Journal, 1 Jan. 1756), and William Curry was manager for a while at Dunmanway (C.E.P., 4 Feb. 1760; Stephenson's reports, 1764 and 1765, p. 21). One John McDonnell was a city manufacturer in the 1750s (e.g. advert. in Cork Journal, 29 Nov. 1757), and one of the same name held leases of bleach greens at New Grove and Blarney in the 1780s (see adverts. in C.E.P., 26 Feb., 19 March 1789).

weavers were added to his newly-founded Ulster colony. A few years later one Inishannon manufacturer was maintaining a city warehouse where mixed and pure cotton goods 'all made in the French taste' were being sold. By that time a number of linen manufacturers in the city were producing so-called 'cottons' with other linens. Inishannon may not have been the exclusive centre of diffusion, but those learning the new techniques there were in the forefront of similar developments elsewhere: Richard Higginson, an Inishannon apprentice, helped to set up Lord Boyle's Castlemartyr manufactory in 1763, and began to manufacture there cottons, linens and 'the several branches introduced by the French'; two decades later Higginson was a cotton spinner and manufacturer in the city. John McCleireight, the northern manager at Inishannon from the early 'fifties, became a partner in a much larger linen enterprise at Blarney in 1764 and actually moved there some years later. Inishannon town itself continued as a centre of mixed goods manufacture for more than half a century, long after the French settlers had disappeared - in 1783 four manufacturers kept about 100 looms between them and Inishannon's specialization must have had some influence on its larger neighbour, Bandon, where half-cottons became an important part of its linen manufacture in the 1780s.


201. See advert by Theady Boyle, C.J., 4 March 1756; Stephenson, Inquiry p. 182.

202. Stephenson's reports, 1762 and 1763, p. 49; C.E.P., 28 May 1787.

203. Stephenson, Inquiry, p. 184; Stephenson's reports 1762 and 1763, pp. 18-9; C.E.P., 2 Feb. 1769.


205. Beaufort, Travels 1788, ii, p. 57.
Between the coming of cotton in the 1750s and the technical transformation of cotton-based manufacture in the 1780s the main development in this branch of the linen trade was the growth of several large-scale bleach-works, with associated loom-shops, situated away from the immediate proximity of the city. The labour unrest among urban linen weavers and the occasionally violent opposition of woollen and worsted weavers to the city manufacture were factors in this urban exodus, but with technical improvements in bleaching making it a more capital-intensive process, draper-bleachers sought to extend their operations in the weaving sector. Glasheen a mile west of the city may have been the first such enterprise, but that at Blarney built about 1764 by McCreight, O'Donoghue and Forrest was the largest, with eighty looms and a large bleach-yard, in all a fixed investment of about £5,000. Its construction was the first phase in the establishment of a remarkable industrial village that had some of the characteristics of the landlord-sponsored manufactory, but was to be heavily influenced by proximity to the city. Blarney before the early 'sixties was only 'two or three mud-cabins', but through the endeavours of the owner of the small estate on which it was situated, James St. John Jefferyes, a number of manufacturers, from the city and elsewhere, who required an ample fall of water were encouraged to move there. Having already by 1764 drawn up, in Robert Stephenson's words, 'the most extensive plan for establishing a linen manufacture, and the most elegant plan of a village, that I ever did see in the British Dominions ...', Jefferyes proceeded over the next decade to lease blocks of land and water-rights.

206. See advert. for its sale in C.E.P., 1 Feb. 1770.
207. Stephenson's reports, 1764 and 1765, pp. 19-20; Young, Tour, ii, p. 35.
208. Young, Tour, ii, p. 33.
209. Stephenson's reports, 1764 and 1765, p. 19.
to manufacturers, in some cases accompanied by capital loans, in others with the mills already constructed before letting. In 1771-2 two Dublin linen-and-cotton printers began to operate the region's first large print-works near the village - in which they provided only about an eighth of the initial construction cost of £4,100 - and a year later a further bleach-works was built by another lessee. These were joined by woollen, leather, paper, iron and flour mills; there were in all thirteen mills by 1776. At that stage Jefferyes had laid out in loans or in actual buildings over £8,000, while manufacturers themselves had invested over £9,000, with grants from the Linen Board, the Dublin Society and parliament, bringing the total to nearly £20,000. Of this total linen absorbed more than half, including grants of about £2,000 from the Linen Board. Linen was also the greatest employer at Blarney, with some 300 hands directly involved in 1776.

There was nothing novel in Jefferyes' methods, only in the scale and variety of development. Blarney like so many earlier rural manufactories was at first an overwhelmingly Protestant town; charter-school apprentices were among the early weavers. And Jefferyes, like Cox, Adderley and several other linen promoters, was active in parliamentary politics, a place-holder and close to the sources of patronage: throughout the 1770s he was a trustee of the Linen Board. His capacity to finance two-fifths of this development was probably also helped by the fact that he was a partner in the Tonson/Warren bank from an early stage.

211. Ibid. pp. 33-4.
212. Ibid. pp. 34-7.
213. Transcripts of the religious census of Cloyne, 1766 (P.R.O.I. M2,476; M5,036).
214. O'Kelly, Banks of Munster, p. 53.
During the American war weavers' combinations at the site, the general recession in the linen industry, and perhaps Jefferyes' death in 1780, led to the collapse of two of the three linen enterprises.\textsuperscript{215} They were reactivated after some years, again as centres for the weaving and bleaching of mixed goods, but with the addition of the machine-spinning of cotton, first by jenny at Edward O'Donoghue's premises from 1783, then by water-frame as well at Thomas Deaves five-storey mill built in the village in 1787.\textsuperscript{216} Prior to the early 'eighties, cotton for the region's mixed goods manufacturers had been spun on worsted wheels in the districts already familiar with wool spinning, notably north-west Cork and the Killarney district. In the latter area in the mid 'seventies, as much as thirty-five hundredweight of cotton had been put out weekly on Cork (and Dublin) account,\textsuperscript{217} and this trade took up the slack left by the fall-off in worsted spinning. When the jenny was introduced, along with mechanical means of preparing cotton wool, hand-spinning in the remoter districts declined but did not totally disappear.

The falling price of raw cotton and the new availability of cotton yarn suitable for warp, first from England and the Dublin area, then locally once water-frames and mules were introduced, increased the proportion of cotton used in mixed goods, raised the demand for such cloths and finally brought about the extensive manufacture of pure cotton itself, all in the course of a few years in the mid-eighties. By 1787-8 there were about sixteen textile manufacturers specifically making cotton, spread

\textsuperscript{215} Hibernian Chronicle, 18 Sept. 1780; Arbuthnot's report, 1783, pp. 40-3. The print-yard however continued under the same management until the end of the century, and textile printing continued at the site until at least 1810 (Townsend, Cork, p. 675).

\textsuperscript{216} Arbuthnot's report, 1783, pp. 41-2; Arbuthnot's report, 1788, pp. 4-5.

\textsuperscript{217} Arbuthnot's report, 1783, pp. 38-9.
between Cork city, Blarney, Inishannon, Bandon, Clonakilty, Dunmanway and Killarney. One city firm already stood apart from other manufacturers in its scale of operations, and was to remain the keystone of the region's cotton industry till the end of the century, that of Henry Sadleir and partners. In the 1770s Sadleir had been one of the city's two largest master worsted-combers and yarn shippers, and to a limited extent also a general merchant. His partnership retained an interest in worsted well into the 1780s, employing more than 6,000 in combing and spinning in 1783. But two years previously they had diversified into cotton, transferring some of their extensive rural female labour force into cotton spinning, installing jenny-shops in their city premises, and taking over the Glasheen factory for the weaving, bleaching and printing of Manchester-style mixed cloths. Having imported 'machines and hands' from England they had already committed £8,000 to the manufacture by 1783, and were employing about 1,000 in it. From that time until 1796 the partnership expanded on the strength of commercial success in the local market and the consistent ploughing back of profits. As they expanded a clear-cut division of operations emerged: jenny spinning remained mainly a city operation, while Glasheen remained the bleaching, dyeing and printing centre; weavers of fine cottons were also based there, but the weaving of plain cotton became a dispersed activity around the country, with female labour being used for the first time at the loom. At Mitchelstown, where Lord Kingsborough had been attempting to introduce the cotton manufacture since 1783 (as part of his scheme for renovating the town), the Sadleirs

218. Lucas Directory, 1787; Arbuthnot's report, 1788, pp. 4, 6-7; C.E.P., 5 Jan. 1788.


leased a weaving factory from him rent-free in 1791, and employed over 600 girls there; a smaller factory was established with a similar concession on the Smith-Barry estate. By the mid-nineties the partnership had invested more than £40,000 in buildings and machinery, and gave direct employment to 4,000; by buying in the plain cottons of other city manufacturers they were able to claim that 10,000 people were in employment because of their manufacture.

By this time the Sadleirs were probably the largest cotton firm in the whole country, whether measured by the size of their capital investment or by their labour force. And the Cork industry as a whole formed a major segment of the total Irish manufacture at this period: the city's imports of cotton wool, which had averaged about 2,350 cwt. p.a. in the 1780s and 3,740 cwt. p.a. between 1790 and 1798, formed between a third and a quarter of total Irish imports. There were perhaps as many as 3,000 looms in the industry within the region towards the end of the century.

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223. See David Dickson, 'Aspects of the rise and decline of the Irish cotton industry' (paper delivered at Scottish/Irish symposium on the comparative economic development of Scotland and Ireland, Sept. 1976).

224. In 1802 - when the peak had been passed in the local manufacture - this was the estimated number of cotton looms in the counties Cork, Waterford and Limerick, and the great majority can be assumed to have been in Cork (J. Warburton, J. Whitelaw and R. Walsh, The history of the city of Dublin from the earliest accounts to the present time (London, 1818), ii, p. 972n.).
The growth of this cotton manufacture arose for a number of reasons. Familiarity with the raw material a generation before the technical breakthroughs in spinning laid the foundations. Cork's close links with the West Indies had certainly helped the early growth of the trade, but this factor was probably not as important as some contemporaries made out: only in four years between 1781 and 1799 was more than 50% of the wool imported directly from across the Atlantic. A more relevant factor was the release of resources from the declining worsted spinning trade: there were several other former master-combers apart from the Sadleirs who entered cotton, and Thomas Deaves of Blarney had a family background in the woollen trade. But as important as the transfer of capital and entrepreneurial resources was that of labour: some of the displaced wool spinners became hand-spinners of cotton, others found more enduring employment as cotton weavers, and former combers were able to work in jenny-shops instead. The regional advantage in labour costs must also have an influence on the Cork industry; Henry Sadleir himself observed as late as 1800 that he knew of 'no article of manufacture in which the price of labour bears so great a proportion to the capital as the cotton manufacture'. With the notable exception of Deaves' Blarney mill there was no attempt to introduce large-scale water-powered spinning into the region before 1800, and the jenny, augmented presumably by the horse-powered mule for cotton warps, remained the standard method of spinning at a time when the water-frame was spreading in the Dublin and Belfast regions.

226. Notably Connell and Pratt - who went bankrupt in 1793 (C.E.P. 1 April 1793; Dublin Gazette, 14-17 Dec. 1793).
228. According to a survey of Irish spinning mills c. 1800, Sadleirs' city mill was about one-eighth the average capacity of the fifteen other mills in the country: return of the water-powered mills spinning cotton twist, [c. 1800], Foster MSS (P.R.O.N.I. D562/8885). Cf. Dickson 'Aspects of the Irish cotton industry'.
Cheap labour, a large pool of simple textile skills, and a general familiarity with the putting-out system made cotton indeed seem 'the best adapted \[manufacture\] to this part of the kingdom of any ever attempted ... in it'.\(^{229}\) Yet from the time of the recession of 1797 the local fortunes of cotton were sharply reversed.\(^{230}\) And in 1800 the alarmed reaction of the largest manufacturers, Sadleir and Deaves, to the commercial aspects of the Union proposals and the threat of a future reduction in Anglo-Irish customs duties,\(^{231}\) was not shared by any other industrial group in the city. Their discomfiture was understandable, but it was related to local circumstances rather than to the Union; in the course of 1801 both concerns closed, Sadleir declaring bankruptcy in March 1801 with debts of £38,000 and Deaves apparently selling off about that time.\(^{232}\) It is not clear what precipitated this; the disastrous harvests of 1800-1 must have seriously affected domestic consumption. Sadleir however was already financially embarrassed a year earlier because of a run of commercial failures in the city.\(^{233}\)

Over the following quarter of a century Cork fell from being a major cotton centre to a peripheral producer: between 1802 and 1822 the city was

\(^{229}\) Sadleir and co. to Foster, 28 Jan. 1785 (loc.cit.).

\(^{230}\) See editorial comment in Cork Gazette, 23 Aug. 1797; advert. by Heyward St. Leger, C.E.P., 1 Nov. 1798.

\(^{231}\) Evidence of Henry Sadleir, [March 1800], pp. 8-9; petition of Thomas Deaves, 1 March 1800, J.H.C.I. XIX, p. 72.

\(^{232}\) For the Sadleirs' bankruptcy, see Dublin Gazette, 7-10 March, 12-14 May 1801. It is not clear when Deaves ceased trading, but very shortly afterwards his Blarney mills were in the hands of 'Bradshaw and Popham ': return of the water-powered mills spinning cotton twist, \[c. 1800\] (loc. cit.).

\(^{233}\) Henry Sadleir, Cork to John Purcell, 29 Jan. 1800, Ryan Purcell MSS (Cork Archives Council).
only importing cotton wool in about the same quantities as it had done in the 1780s - at a time when the industry was rapidly advancing in the hinterlands of Dublin and Belfast. In the city itself and at Blarney, the manufacture withered away almost completely within a few years of the new century. Deaves pioneering mill was converted to flax-spinning for the sail-cloth manufacture, Mitchelstown developed an anemic linen trade and in the city worsted manufacturers may have taken over some of the premises and stock left by the cotton industry. However at Bandon, the leading cotton manufacturer since the 1780s, George Allman, continued in business and built a massive spinning mill in 1802, an investment variously calculated at sums between £15,000 and £30,000. Together with a number of smaller manufacturers he expanded cotton weaving so that cords and to a lesser extent calico joined linen ticken to become the staples of the town. At the peak of prosperity in the early 1820s some 2,000 looms were said to have been employed in the neighbourhood on cotton.

The survival of cotton exclusively in the Bandon district came about because of the specialization there in several coarse lines which were sold far outside south Munster; local skills in coarse linen weaving - and the


236. Beaufort, Travels 1806-7, ii(1), p. 5; Townsend, Cork, pp. 369-70; report on the decline of manufactures, c. 1843, section on Bandon, O'Connell MSS (N.L.I. MS 13629/5); Second series of reports of the Loyal National Repeal Association of Ireland (Dublin, 1940), pp. 101-2.
supply of linen yarn to supplement cotton - were fully exploited. In contrast the Cork manufacturers had attempted to master a wide range of cloths, from fashion goods to the coarsest fustian, in order to insulate as far as possible the local market from outside competition, an aim which early successes had made appear possible. And the city industry ended not so much because of the bankruptcy and closure of the pioneers, but because no other large investors stepped in after them. Sadleir's collapse no doubt scared others off, but ultimately it was the growth of a number of other industries in the city area with more assured prospects, and offering returns as attractive as those in cotton had ever been, which ended investment in it.

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The woollen, linen and cotton manufacturers were together by far the most important source of industrial employment throughout the century, both in the towns and, more emphatically, in the countryside. Food processing was second but as we have seen in the previous chapter, employment in it was heavily concentrated in the city. A long way behind were the alcohol industries, yet their evolution is of major relevance in any analysis of the region's industrial development: not only were brewing and distilling one of the few areas of successful early industrialization, but the scale of capital investment in a small number of breweries and distilleries towards the end of the century put even the textile industries into the shade.

At the beginning of the period, brewing was generally a very small-scale operation: outside the city at inns, ale-shops, and the larger private houses brewing was conducted on the premises. All production for sale was in theory gauged by officers of the Excise (or in the case of those distant from towns, an annual levy based on an estimate was charged);
in the framing of excise regulations there was no attempt until late in the century to discourage small-scale production, in spite of the problems of monitoring it. In 1733 there were about 220 brewers formally registered in the region (excluding the excise district of Mallow, i.e. north Cork); all but thirteen of them appear to have been retail brewers, producing beer for sale on the premises only.\(^{237}\) No doubt a majority of these used only local raw materials, for although there was hardly any home-growing of hops, unhopped beer was perfectly adequate for immediate consumption. But if beer or ale was being transported any distance hops were necessary; nine of the 'common' or wholesale brewers of 1733 were located in the city, with two at Passage, two at Kinsale, and it can be presumed that they were using imported hops. Ship-victualling provided the earliest impulse towards commercial production: in the 1690s Edward Hoare in his capacity as naval victualler at Kinsale operated a 'brew-house' able to produce forty-five tons of beer per week, a potential annual output of almost 20,000 barrels which would have been large even by contemporary London standards; for one order in 1693 he brewed about 1,000 tons.\(^{238}\) It seems likely that from this time the single most important trade for the larger Cork city brewers was official and private victualling of shipping.

Beer drinking had no particular cultural associations. It was the cheapest and most widely consumed alcohol in town and country. Its competitors, home-made grain spirits, cider, wine and imported spirits were, in general, more exclusive. Even in the case of whiskey, neither its production nor its consumption was important in the region before the

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238. Edward Hoare to Sir Robert Southwell, 28 Nov. 1693, 8 April 1694, Kinsale manorial papers vi.
late eighteenth century (in contrast to other parts of Ireland), although it was certainly not unknown - Carbery 'usquebaugh' was sufficiently good for Sir Richard Cox to send presents of it to England in 1714239 - and in the city grain distilling was a supplementary activity for several brewers. In 1733 there were nine registered distillers in the region (excluding the Mallow excise district), eight of whom were in the city.240 Thomas Pembrock, mayor of the city in that year, kept two stills with combined capacity of over 500 gallons.241 But the region only accounted for a mere 2½% of the national spirit duties in the 1750s,242 and between 1766 and 1772 the total number of registered stills (including the Mallow district) fluctuated between five and ten; the three to five city ones paid about three-quarters of the duties.243 At this stage limited quantities of whiskey were being imported from Drogheda and other parts of Leinster and Ulster.244 For most spirit-drinkers however, rum and to a lesser extent brandy were sufficiently cheap for consumption of them to penetrate fairly far down the income hierarchy. One local newspaper correspondent in 1770 making the case for a rise in the business of the city 'grocery' trade during the previous fifteen years compared the earlier situation when

239. Sir Richard Cox to Edward Southwell, 31 Aug. 1714, Southwell MSS (B.L. Add. MS 38,157, f.112 [N.L.I. Mic. p1,049]).
240. 'Reports of Thompson, 1733', pp. 38, 54, 56.
244. Copy, John Usher, Lismore to Sir William Abdy, 6 March 1744/5, Lismore MSS (N.L.I. MS 7,180); advert. by Michael Creagh in Munster Journal, 4 Feb. 1750/1; advert. by Edward Hopper offering Queen's co. whiskey, C.E.P., 5 March 1781; and advert. for 'Leinster whiskey' in Hibernian Chronicle, 22 Dec. 1783.
'the farmer who ... could not clear more than eighty or one hundred pounds a year, was contented with a keg or anchor of rum for his year's stock ... as the prices of products advanced, he [has] of course, enlarged his expenses, instead of rum he must have shrub; times mending, wine is introduced, and the plain farmer's wife becomes a fine lady ...'.

The taste for foreign wines and spirits was supplemented by a growing demand for English beer, specifically London porter, the product of new, large-scale breweries. Beer imports from England grew sharply from the 1740s, and soon Cork taverns were making a point of advertising their stocks of London porter. One visitor to the city in the 1770s found porter 'more common than in any part of England, out of London'.

Nationally the brewing industry declined in the third quarter of the century, at least partly because of this English competition; the price advantages which large-scale production conferred on the English brewer seeking to penetrate the Irish market were augmented by fiscal and tariff arrangements which more than offset transport costs. However the impact on the local brewing trade was to hasten the decline of the retail brewer. As in Dublin and the south-east, the retail brewers all but disappeared by 1790: from the position in the 1730s when there had been well over 200 in the region, there were only twenty-four left half a century later and but one in the city.


and 'small beer': from the end of the 'fifties until the late 'eighties excise duties on beer and ale brewed in the city revenue district fluctuated between £10,600 and £26,000, being highest in wartime. 250

There were usually up to twenty common brewers in the city, with a considerable turnover in ownership. They were small concerns: in the mid-1770s the average output of the fifteen most important brewers was under 5,000 barrels p.a. and the largest, Aylmer Allen's in Cramer Square, produced about 12,800 barrels. 251 The latter had acquired the brewery and maltings several years earlier, on which the previous owner, J. Plaince, had spent 'above £3,000' making it 'the completest, convenientest brewery in the city'. 252 In 1782 Allen converted the premises at 'great expense' into what was described as a 'porter brewery', but his hopes of doing away with 'Thames water prejudice' were unfulfilled, 253 for although he continued to brew porter (and pale ale) till his death nine years later, 254 Cork remained a highly important market for the London firms throughout the 1780s. 255


251. Cf. charter incorporating a guild of brewers in Cork city, 1743, Beamish and Crawford MSS (at the brewery, South Main St., Cork); Observations on brewing trade, p. 66.

252. Advert. in Hibernian Chronicle, 3 Sept. 1772.

253. See Allen's advert. in Hibernian Chronicle, 16 Dec. 1782.

254. See adverts. in C.E.P. 2 March 1786, 26 Jan. 1789. For comments on his death and the failure of his efforts, see respectively Hibernian Chronicle, 5 May 1791; Cork Gazette, 17 Sept. 1791.

Reform of the Irish brewery laws had been aired for several decades as revenue from this quarter stagnated. The scale of English imports was not in the end the decisive factor causing fiscal reform; alarm at the growing consumption of domestic spirits, licit and illicit, seems to have precipitated the legislation of 1790-1, which among other things raised the excise duty on domestic spirits and the import duties on English beer. There had been no particular feeling in Cork in favour of curbing imports, presumably because 'the quality of most of the malt liquor brewed in Cork this length of time has been so execrably bad that the people must have been much distressed but for English beer ...'.

In the same year as the legislation favouring beer production was enacted, the 'Cork Porter Brewery' was established; a partnership between two already associated export merchants, William Beamish and William Crawford, and two pale ale brewers, Digby O'Brien and Richard Barrett, began by purchasing the lease of Allen's brewery, paying £500 for the utensils, and within a year they were in production. It seems that initially Beamish and Crawford advanced about £27,000 to the company and that O'Brien and Barrett were sole managers; after seven years half the profits were to be reinvested.

As it turned out the brewery, by using the technology of the London industry to the full, was spectacularly successful: turnover rose from £38,966 in the first year (1792-3) to £151,098 in 1800-1, and the net profit as a percentage of porter sales over the first nine years was 14.7%. Output passed 100,000 tierces (42 gallons) in the 1805-6,

256. MS note (by J. B. Bennett) on N.L.I. copy of Hibernian Chronicle, 8 March 1792.
257. See articles of partnership, 13 Jan. 1792, Beamish and Crawford MSS. The first public advertisement placed by the firm (seeking barley) appeared in C.E.P., 1 Sept. 1791.
258. Articles of partnership, 13 Jan. 1792.
and in the following five years during a period of less rapid growth, sales averaged over £190,000 p.a., with a net profit (similarly calculated) of 15.4%. Beamish and Crawford's brewery was joined by three other large porter breweries in the city in the nine years after 1792. Its nearest rival, the River Lee Brewery, was built in 1796-7 by a partnership of three merchants and a brewer who together put up £36,000. Production figures for it and the other Cork porter breweries do not survive, but taking Thomas Newenham's estimate of 1809, it seems that together they may have equalled Beamish and Crawford's output; on this assumption the total porter produced in the city then, approaching ten million gallons p.a., was four times the output of all the common brewers in 1775. Yet in 1809 there were still about a dozen non-porter breweries in the city, (much smaller concerns admittedly). The market for this rising flood of porter was

259. Stock book 1792-1801; sales book 1792-1801, Beamish and Crawford MSS; O'Keeffe, 'Cork', pp. 50, 52. There appears to be no internal information on capital employed by the firm at this stage. The only contemporary valuation extant is that noted by Beaufort around 1807 - of £300,000 (Beaufort, Travels 1806-7, ii(2), p. 2). This seems rather high when compared with the ratio of capital to barrels brewed at Whitbreads' brewery in London between 1790 and 1794 (Mathias, Brewing industry, p. 553); on the basis of the latter, the output of Beamish and Crawford between 1805 and 1807 would imply total assets of about £180,000 (at early 'nineties prices). If Beaufort's figure however was correct, the return on capital 1806/7-1807/8 was slightly under 11%.


261. Transcript of memoirs of T. S. Reeves, Somerville MSS, pp. 12-3.

262. Newenham suggested that city output was 'somewhat near 300,000 barrels', presumably the 36-gallon statute barrel, not the 42-gallon tierce, and therefore about ten million gallons; Beamish and Crawford produced 4,919,898 gallons in 1809: Newenham, Circumstances of Ireland, p. 225; O'Keeffe, 'Cork', p. 50.


264. William West, Cork directory (Cork, 1810); Connor's Cork directory, 1812 (Cork, 1812).
obviously far greater than that previously catered for by the London breweries. Consumption, particularly outside the towns, must have increased markedly; Newenham, referring specifically to co. Cork in 1805, thought that porter was 'actually ... the favourite liquor among the lower orders. Twelve years ago, they seldom or never drank it'.

Beamish and Crawford assisted distribution by making advances for retail licenses (thirty guineas), without becoming involved in any tied house system at this period. Sales outside the region, and even exports to England and the Caribbean developed after the turn of the century, but these only took up a few per cent of total production.

The rising consumption of porter was certainly not brought about by a popular abandonment of spirits, for although the transformation of brewing was assisted by legislative changes which discriminated against spirits, the 1790s saw almost as striking a revolution in the Cork distilling industry as in brewing. In the early 1770s there were only five legal stills in the region; by contrast over 400,000 gallons of rum, a quarter of the national total, were being imported at Cork; a decade later there were thirty-seven legal stills, while rum imports were down by a quarter. Such a juxtapositioning of figures may however be misleading, for the rise in legal distilleries was at least partly a result of improved excise administration and the exposure of illicit distilling. Before the 1770s there had been a number of villages associated

266. Wakefield, Account of Ireland, i, p. 744n.
267. For export figures, see O'Keeffe, 'Cork', pp. 51, 53.
268. Account of stills, 1766-72 (P.R.O.I. M5,955).
with distilling, legal and illegal - Enniskean, Ballyvourney and Macroom - but this was probably no more than a diversification from the more important activity, the distribution of smuggled brandy, tobacco and tea.

This pattern was changing in the 'seventies; from then until the early 1790s the centre of illicit distillation was around Mitchelstown, Kilworth and Tallow. It was no coincidence that in 1782 there were more legal stills, of greater average capacity, recorded at Mitchelstown than at Cork city itself; 48% of the region's legal stills at that time were inside a triangle in the north-east bounded approximately by Charleville, Mallow and Cappoquin. As elsewhere there was considerable overlap between the areas with high densities of legal stills, and those neighbourhoods where distilling frauds were most prevalent. It is highly unlikely that illicit distilling had been an important traditional feature in this part of the region; certainly there is no evidence for legal or illegal activity before the 'seventies. The local expansion of tillage in the Fermoy/Condons district during that decade, prompted in the first instance by other factors, was almost certainly the catalyst; the distillers became a useful source of local demand, supplementing the flour mills and the corn factors. By the 1780s small maltings were very numerous in the Mallow excise district (which took in this area), but their numbers declined sharply over the following ten years; the changing fortunes of

270. Revenue Commissioners minutes, 8 Sept. 1760 (P.R.O. Customs/I/60); Smith, Cork, i, pp. 189, 260.


273. See above, p. 474-5.
local distilling were partly responsible for this: there were twenty distilleries registered in the Mallow district in 1781-2, three in 1790 and not one in 1806-7.  

In the 1780s large-scale distilling was beginning to appear in Dublin, but although average still size in the Cork excise district rose from 333 gallons in 1781-2 to 1,133 in 1790, the most popular spirits preferences in the region remained rum and brandy, in contrast to other parts of the country. But from about 1790 rising sugar and rum duties helped to effect a marked consumption shift. Already by 1792 Thomas Hewitt, a former dealer in West India goods, was advising correspondents that rum 'is not now vendible here, we have got the taste of whiskey and are grown fond of it ...'. This was rather anticipating the actual victory of whiskey, for while national imports of rum fell steeply in the course of the decade, Cork retained more than half of the remaining trade. Nevertheless between 1789 and 1796 three major distilleries and about five lesser ones were established in the city. In the latter year there were altogether ten distilleries in the city containing over four-fifths of the region's still capacity. Of the new distilleries, that at Crosses' Green set up in 1789 was the largest; its owner, Thomas Walker, had been a brewer and

274. Account of stills, 1781-2; account of stills, 1790-1, J.H.C.I. XV cxxl-iv; Inquiry into fees, gratuities, perquisites and emoluments received in certain public offices in Ireland: fifth report, H.C. 1806/7 (124), vi, p. 204.

275. Account of stills, 1781-2; account of stills, 1790-1. N.B. only half the 1781-2 capacity was actually in the city itself, whereas in 1790-1 all stills in the Cork revenue district were in the city.


279. See Walker's advert. in C.E.P., 19 Feb. 1789.
and malster in Mallow, but during the 1780s had become a wholesale spirits dealer in the city. Walker was the first to use steam-power (a 40 h.p. Boulton & Watt engine, installed shortly after the turn of the century), and by 1808 his distillery was regarded as the largest in Ireland.

The Watercourse distillery, opened in 1794, was built by a partnership of Thomas Hewitt, the export merchant and tallow Chandler, John Teulon, a butter buyer, and Richard Blunt, a London distiller; together they subscribed £15,000 at least half of which was tied up in buildings and plant; under a new partnership deed in 1799 (when an additional local partner was introduced) the subscribed capital was raised to £40,000.

In that year Hewitt & co.'s total sales were worth just over £60,000; they had averaged over £42,000 since production began in 1794. By 1808 Hewitt and Walker were producing about one million gallons of whiskey p.a. between them, and held about 56% of the city's total capacity.

Shortly after the two firms were amalgamated for a number of years.

The distilling industry's period of maximum growth spanned about one and a half decades from 1790. In the mid-nineties Cork was only one of a number of centres of growth; at that time the city possessed about 9% of

280. Lucas' directory, 1787; evidence of Thomas Walker, 5 May 1792 in Parliamentary debates, 1792, p. 258.
281. Beaufort, Travels 1806-7, ii(2), p. 2; Wakefield, Account of Ireland, ii, p. 732n.; Hall, Tour through Ireland, p. 156-7; Rees' Cyclopaedia (London, 1819), entry for Cork city.
285. Inquiry into fees ... fifth report, p. 204; Wakefield, Account of Ireland, i, p. 732n.
286. Hall, Tour through Ireland, p. 156.
national still capacity, and was producing about 11% of the spirits on which duty was levied. However the four largest stills in the country were located in Cork in 1796.\textsuperscript{287} This might appear to be a case of late-comers taking advantage of a changing technology - and of current distillery laws; since 1780 duties had been calculated on the basis of still size with the official assumptions about output biased to favour larger stills.\textsuperscript{288}

But when the still charges per month (i.e. presumed frequency of distillings) were revised in the revenue legislation of 1797 to take account of the increasing speed of distillation, even a new firm like Hewitt's reacted by immediately trying to trade in their 1,500-gallon still for one of 1,000 gallons.\textsuperscript{289} After the turn of the century the consistent upward adjustment of still charges was both consequence and cause of increasing distilling efficiency; thus although total still capacity in the city actually fell from 11,828 gallons in 1795-6 to 8,199 gallons in 1806-7, local output - even allowing for under-licensing in the 1790s - must have at least quadrupled; over this period the number of distilleries dropped from ten to five.\textsuperscript{290} By 1807 Cork's proportion of national distilling capacity had jumped to 32.5%, and its share of total legal output cannot have been dissimilar.\textsuperscript{291}

\textsuperscript{287} Return of stills 24 Feb. 1796; account of malt-houses and duties paid on malt and spirits, 24 Jan. 1797, J.H.C.I. XVII, xlv.


\textsuperscript{289} Copy, Hewitt to Messrs. Edgar, Curtis and co., 23 May 1797, Hewitt distillery letterbook.

\textsuperscript{290} Return of stills, 24 Feb. 1796; account of malt-houses and duties ..., 24 Jan. 1797; Inquiry into fees ..., fifth report, p. 204; Wakefield, Account of Ireland, i, p. 732n.

\textsuperscript{291} Inquiry into fees ..., fifth report, p. 204.
By the turn of the century there was hardly any competition in the region from illicit distillers to the city firms, in contrast to the situation in other provinces; however even in the 1780s illicit distillation can only have had marginal impact on local spirit consumption. The real competitor, rum, was not overcome so quickly, and its demise was not purely a function of relative prices. It is quite clear that there was a residual local liking for rum which influenced the new distillers in several ways. Colouring agents were supplied to retailers to give whiskey the appearance of rum. More importantly there was the rectifying and compounding trade; in the course of the 'nineties as home spirits replaced imports, much of the distillers' products was only marketed after it had been rectified or compounded with various flavourings. 'Irish brandy', local so-called rum, liquers and gin were being offered by most of the big distillers. In the case of Hewitt's distillery between 1794 and 1799 such rum, brandy and 'geneva' of their own manufacture accounted for over a quarter of total sales. After 1797 'gross' (i.e. primary) distillers were prohibited from owning rectifying and compounding stills, but the subsequent division of ownership was a myth. Three of the five distilleries in 1807 had adjoining to them rectifying distilleries, which in the opinion of the Cork surveyor of excise were 'the great channel through which the gross distilleries' product is sent into circulation'. There were eleven rectifying houses in the city then, between them containing 65% of national capacity; the close association between primary distillers and


293. E.g. adverts. by Walker (C.E.P., 26 Feb. 1792); by Craig (C.E.P., 3 Dec. 1795, 11 April 1796); by Wyse (C.E.P., 19 Nov. 1795).

294. Hewitt whiskey sales books, 1794-1803; Hewitt account-book 1794-1803 (monthly analysis), Cork Distillers MSS.

295. Inquiry into fees ... fifth report, p. 224.
rectifiers was unknown in Dublin or elsewhere.\textsuperscript{296} The actual nature of their concoctions remains an unknown, but presumably molasses, wine and cider as well as currants and aniseed were being used, to help Munster palates adjust to grain spirits.

Cork whiskey was being shipped to Dublin and other Irish markets before the turn of the century and from about 1803 the export trade, mainly to England, became far more important than the export of porter: between 1802 and 1808 an average of over 280,000 gallons were exported p.a.,\textsuperscript{297} at least an eighth of the city's output. Spirit compounds however were sold exclusively on the domestic market.

Despite the competition between their products, Cork's brewing and distilling industries shared a number of common features. Their period of industrial take-off was roughly the same, physically they were concentrated very largely on the city, and their entrepreneurs were generally local, a number diversifying out of foreign trade. They both depended on imported technology, and there seems to have been no notable innovation in process or product. A number of the porter breweries had English partners,\textsuperscript{298} and in the distilleries there were instances of Englishmen, both as partners and non-partner managers. One James Craig who had had experience in both Edinburgh and London distilleries managed Walker's distillery at the beginning for several months, then worked at the Blackpool distillery before setting up in business as a rectifier.\textsuperscript{299} On the whole however the availability of local capital and local entrepreneurs is the more striking

\textsuperscript{296} Ibid. pp. 205, 224.


\textsuperscript{298} Hall, Tour through Ireland, p. 194.

\textsuperscript{299} See Craig's adverts. in C.E.P., 10 Dec. 1792, 3 Dec. 1795, 11 April 1796.
feature of this industrial transformation, and is evidence against the view that factor supply problems provide the explanation for industrial failure in other sectors. Labour costs were hardly a relevant factor in determining Cork's location as the rival to Dublin in the alcohol industries. The labour force was comparatively small: in 1821 only 1,221 people were directly employed in city distilleries, breweries and maltings; this estimate was of course made at a time of contracting production, but wartime employment cannot have much exceeded 2,000.  

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The industrialization of the alcohol industries at the end of the period was the most enduring change in the manufacturing sector. There were other capital-intensive industries emerging about the same time, of marginal importance to the economy perhaps, but demonstrating the versatility of contemporary risk investment. Paper manufacturing, restricted since its introduction in the 1710s to the Glanmire valley on the edge of the liberties, and mainly owned by city printers and newspaper publishers, was transformed in the 1790s and 1800s when the O'Sullivan family built up a complex of five paper mills spread between Beechmount (where they also had an iron foundry), Dripsey (where they created an industrial village) and Blarney (where they replaced textiles as the major source of employment). By 1810 they were the largest paper manufacturers in Ireland, and had begun to export the product. The family were also flax-spinners and sail-cloth manufacturers at Blarney.

300. Fourth report of the Commissioners of inquiry into revenue arising in Ireland H.C. 1822 xiii; Beaufort noted c.1807 that between 460 and 480 were fully employed at Beamish and Crawford's brewery (Beaufort, Travels 1806-7, ii(2), p. 2); in 1821 the largest brewery (presumably Beamish and Crawford) was only employing 165.

301. See deed of mortgage, Thomas Bond and George Winter, part of Ballyrosheen, 29 Dec. 1736, Preston MSS (Cork Archives Council).

Glass manufacture was carried on fitfully from 1783, and from the 'nineties drinking glasses, 'glass ware' and bottles made a fluctuating contribution to Cork's limited export trade in manufactured goods. Glass works, like paper 'factories' were sited in the Glanmire valley, but at the end of the period they were overshadowed there by the flour mills, iron mills, woollen spinning mills, mustard mills and bleach greens which all used water or water-power in at least part of their manufacture. The Browne family had encouraged mill development around Riverstown in the mid-eighteenth century, but the small industrial villages of Glanmire and Sallybrook up the valley seem to have been created by mill owners rather than ground landlords.

* * *

From this review of industrial evolution, several conclusions seem possible. Firstly, whatever the passivity of the city in foreign trade and the lack of continuity in the merchant community, there were visible and productive links between trade and manufacturing: at the beginning of the century city merchants were closely involved in the changing fortunes of the woollen industry, and in sail-cloth and sugar manufacture; at the end of the century the region's largest flour miller (Callaghan), largest woollen manufacturer (Lynch), largest cotton manufacturer (Sadleir), largest brewing partnership (Beamish and Crawford), and largest investor in infrastructural development (Anderson) were all previously established export merchants. Against this it can be said that the region's industrial achievement was modest when compared to the trading wealth of the city over the century. A capital-intensive industry such as sugar-

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304. E.g. deed of mortgage, Thomas Bond and Bishop Jemmet Brown, part of Ballyrosheen, 22 May 1753, Preston MSS.
refining collapsed after early growth in mid-century, and its later modest recovery was unimpressive compared to the Dublin sugar industry.

The role of landlords in industrial development can be classed as mildly active, with occasional displays of vigorous spending - in the linen industry, in mineral prospecting (and in a few cases in mineral exploitation), in flour milling and in the cotton industry. Of the industrial entrepreneurs themselves it is hard to generalize; Protestants naturally dominated in the major capital ventures, reflecting the distribution of mercantile wealth, but Quakers and other non-conformists did not play a particularly prominent role. At the end of the period there were numerous Catholics active in the manufacturing sector, the most important of whom were Marcus Lynch, Daniel Callaghan and the O'Sullivan family.

The fact that the largest single units of production in the sail-cloth, cotton, brewing, distilling and paper-making industries in Ireland were sited c. 1800 at Cork, gives the region's industrial history a national significance, and its subsequent industrial malaise can only be explained in supra-regional terms. But one particular influence favouring Cork's short industrial prominence was the intensity of official demand, especially during the French wars, both for consumption goods (foodstuffs, drink and clothing), and the goods and services required for the construction of naval fortifications and barracks around Cork, and for ship repairing. This source of demand should not however detract from the importance of domestic demand, urban and rural, coming from a growing number of consumers who were benefitting from the buoyancy of agricultural prices that lasted until the end of the French wars. But whether per capita consumption of manufactured goods and foodstuffs was growing by that stage is quite another matter.
Population, the changing level of subsistence, has been covered up to this point as an important background element. That very considerable growth had occurred by the end of the period is immediately clear, but now this had been achieved to best advantage. There is little time as to the direction of change in the early eighteenth century from general evidence, and for the rest of the period when growth was undoubtedly the dominant pattern, the shape of the wave is not readily apparent.

Before the first comprehensive national census of 1801, the only regular official returns relating to population were those of hearths and hearers, as enumerated by the parish remembrancer and hearth-tax collectors. The tax was introduced in 1662, but until 1708 it was varied out by the Commissioners of Revenue: from that time they engaged it directly, and returns were made up of the numbers of hearths in the parishes, or parts of parishes, lying in each revenue district: from an early date hearers were also recorded in the register alone are extant, and only for seven fifteen years spread over the period between 1706 and 1721. These can be supplemented by a return of households in each county classified by religious affiliation, prepared at issue by the hearth-money officials under order from parliament in 1752. Returns relating to the extent (making only the first return) where any one of consecutive annual figures survives are set out below against the figures recorded for 1801.

THE DIMENSIONS OF CHANGE
Population, its changing level and composition, has been treated up to this point as an imprecise background factor. That very considerable growth had occurred by the end of the period is abundantly clear, but how this had been achieved is less obvious. There is little clue as to the direction of change in the early eighteenth century from general evidence, and for the rest of the period when growth was undeniably the dominant pattern, the shape of the curve is not readily apparent.

Before the first comprehensive national census of 1821 the only regular official returns relating to population were those of hearths and houses as enumerated by the parish constables and hearth-tax collectors. The tax was introduced in 1662, but until 1705 it was farmed out by the Commissioners of Revenue. From that time they managed it directly, and returns were made up of the number of houses in the baronies, or parts of baronies, lying in each revenue district; from an early date houses were also recorded in county aggregates. The latter alone are extant, and only for some fifteen years spread over the period between 1706 and 1791. These can be supplemented by a return of households in each county classified by religious affiliation, gathered it seems by the hearth-money officials under order from parliament in 1732. Returns relating to the region (taking only the final return where any run of consecutive annual figures survive) are set out below against the house returns for 1821:

for 1791 - J.H.C. I. XIV, c. 11; for 1821 - Census of Ireland.

for 1774 - Watson's Almanack, 1777:
for 1788 - Watson's Almanack, 1789:
for 1798 - Watson's Almanack, 1799:
for 1808 - Watson's Almanack, 1809:
for 1818 - Watson's Almanack, 1819:
for 1828 - Watson's Almanack, 1829:
for 1838 - Watson's Almanack, 1839:

and Population ... in Ireland (Dublin, 1799), i, p. 5?

- For 1792, 1798, and 1769 - A. Dobbs, An Essay on the Trade and
  Improvement of Ireland (Dublin, 1799), i, p. 5? for 1792, 1798, and 1769 - A. Dobbs, An Essay on the Trade and
  Improvement of Ireland (Dublin, 1799), i, p. 5?

Sources:

- For 1796 - J.C. D. MS 889/2. P. 330;
- For 1792, 1798, and 1769 - A. Dobbs, An Essay on the Trade and
  Improvement of Ireland (Dublin, 1799), i, p. 5?

This return is variously described as 1792-9 and 1794 in the sources cited below.

<table>
<thead>
<tr>
<th>County</th>
<th>1828</th>
<th>1829</th>
<th>1830</th>
<th>1831</th>
<th>1832</th>
<th>1833</th>
<th>1834</th>
<th>1835</th>
<th>1836</th>
<th>1837</th>
<th>1838</th>
<th>1839</th>
<th>1840</th>
<th>1841</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork</td>
<td>1706</td>
<td>1716</td>
<td>1718</td>
<td>1726</td>
<td>1728</td>
<td>1732</td>
<td>1741</td>
<td>1744</td>
<td>1746</td>
<td>1748</td>
<td>1750</td>
<td>1752</td>
<td>1754</td>
<td>1756</td>
</tr>
<tr>
<td>Waterford</td>
<td>3.41</td>
<td>3.75</td>
<td>4.04</td>
<td>4.36</td>
<td>4.68</td>
<td>4.96</td>
<td>5.24</td>
<td>5.52</td>
<td>5.80</td>
<td>6.08</td>
<td>6.36</td>
<td>6.64</td>
<td>6.92</td>
<td>7.20</td>
</tr>
</tbody>
</table>

House Returns, 1796 - 1821
Two things are immediately apparent from these figures; firstly inter-county trends are broadly similar for most years and secondly, the growth pattern that they suggest in the second half of the century – hesitant in the 'fifties and 'sixties, explosive expansion between the 1770s and 1790s – is inherently implausible. These features can be found in the returns for most other clusters of counties around the country, similar changes between years, but unacceptably high growth in the last third of the century. The latter problem has caused most historians to follow Prof. Connell's low opinion of the hearth-money figures before 1790. By highlighting the inadequacies of hearth-money administration prior to reform in the late 1780s, he suggested a set of revised national returns which were calculated on the general assumption that a third of the country's houses went unrecorded before that period. The missing segment had been overlooked, he argued, partly because most of the houses that were exempted from the hearth-tax on the grounds of poverty were not enumerated, and also as a result of frauds and incompetence on the part of the collectors. Certainly the hearth-returns of 1777 and the early 'eighties inspire little confidence, and the scepticism both of contemporaries such as Gervaise Bushe, and modern writers towards this source seems well-founded. But there is one unproven assumption in Prof. Connell's argument; the demonstration of lax standards in the Excise service in the 1780s is no indication that a similar degree of under-recording was the norm at an earlier period; administrative efficiency was not subject to inexorable laws of progress. In fact the internal consistency of the


3. Connell, Population of Ireland, pp. 8-12
hearth-money returns over the first half of the eighteenth century, when all thirty-two counties are compared, is impressive; unlikely fluctuations in individual counties (and in some cases a suspicious lack of movement) only creep in after the early 1750s; the more sharply divergent behaviour of the south Munster returns after 1753 (Table 8:i) is an illustration of this. Thus the quality of the hearth-money data may have been tolerably good between 1712 (by which time direct management was well-established) and 1753; subsequently standards of recording probably fell, either for political or administrative reasons, or because of the growing number of exempted houses belonging to a pauperized substratum. In the case of the Cork region, it seems likely that before 1753 and again in 1791 the most serious under-recording was concentrated in the south-western area of the region - Bear and south Kerry - where parochial control was weak and where, in the early eighteenth century at least, collectors are known to have compounded for the tax. Thus the high Kerry growth rates recorded in Table 8:ii must be treated with caution; nonetheless their very consistency in this respect argues against wholly rejecting them. The Waterford rates are quite the reverse, being very low except between 1753 and 1791; the explanation here seems to lie in the fact that the returns for Waterford city formed a disproportionately large fraction of the county total - about a quarter at mid-century, and therefore the county's rates are not necessarily a reflection of rural trends.

4. Smith, Kerry, p. 77n.
TABLE 8: ii

Annual growth rate of houses 1712-1821
(compound)

<table>
<thead>
<tr>
<th></th>
<th>1712-26⁺</th>
<th>1726⁺-32</th>
<th>1732-44</th>
<th>1744-53⁺⁺</th>
<th>1753⁺⁺-91</th>
<th>1791-1821</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork (excluding city and liberties)*</td>
<td>1.32</td>
<td>0.25</td>
<td>-1.97</td>
<td>0.87</td>
<td>1.59</td>
<td>1.49</td>
</tr>
<tr>
<td>Kerry</td>
<td>1.81</td>
<td>1.56</td>
<td>-3.95</td>
<td>2.41</td>
<td>1.47</td>
<td>1.9</td>
</tr>
<tr>
<td>Waterford</td>
<td>0.99</td>
<td>-0.50</td>
<td>-1.51</td>
<td>0.2</td>
<td>1.82</td>
<td>0.8</td>
</tr>
<tr>
<td>Munster</td>
<td>0.91</td>
<td>0.43</td>
<td>-1.79</td>
<td>1.2</td>
<td>1.5</td>
<td>1.55</td>
</tr>
</tbody>
</table>

*Houses in Cork city and liberties in 1712 estimated at 5,200, and at 10,500 in 1791 (see Append. table xxii). +1725 in the case of Co. Cork. ++1752 in the case of Co. Cork

Sources: as in Table 8:i

Regional trends are therefore best approached from a specific study of the figures for Co. Cork, stripped of the city returns and uncomplicated by those for Kerry and Waterford; their pattern suggests rapid house growth in the first quarter of the century, a trend totally reversed in the second quarter, with a return to very high growth from the 1750s through to 1821. Such a pattern of demographic development is at least plausible in the light of independent evidence.

The vital rates of one Protestant community for which parish registers survive, Ballymodan Church of Ireland congregation at Bandon, provide some support for the possibility of a vigorous expansion of population in the first decades of the century, and its subsequent slowdown to the point of decline. Between 1700 and 1714 this large part-urban Protestant population had an average of 44.84 baptisms and 35.6

5. Church of Ireland parish registers for Ballymodan (P.R.O.I. Mic 30; M6140)
burials p.a.. But between 1725 and 1749 the ratio had altered dramatically, with 68.24 baptisms and 66.8 burials. Baptism and burial totals narrowed in the 1730s, and in the first half of the 1740s burials outnumbered baptisms by five to three. Due to defects in later registers it cannot be ascertained at what point in the second half of the century recovery set in.

This congregation is hardly a representative sample, so that the case for general growth in the region at the beginning of the century remains dependent on the credibility of the hearth data. But there can be no doubt about the difficulties in the course of the second quarter of the century. For, whatever about possible deceleration in the 1730s—as suggested by the Ballymodan registers—the real reverse clearly came in 1740-1: the twenty-two-month crisis began in December 1739 when the potato crop, in the ground and in store, was almost totally destroyed within a few days of the start of the Great Frost. The previous summer had been unusually wet, and much of the diminished corn harvest was sold off because of its rotten state. With both forms of subsistence in very short supply, actual famine ensued. Before the end of January 1739/40, 'the poor' in north Cork were already 'perishing with cold and hunger, notwithstanding great benefactions given'. Cattle mortality followed, spring sowing of corn and planting of potatoes were greatly reduced by seed shortages, and summer drought destroyed the growing

winter corn. But apart from those who died during the two-month frost itself, mortality so far was not heavy. In the early summer of 1740 those without resources to buy the limited food at markets were living on sour milk, nettles and other field weeds. Smallpox appeared in April in the city, but more ominous was the outbreak of spotted fever (presumably typhus), first reported in June, and this was later joined by the 'bloody flux' (dysentery). The food supply situation was slightly better after the harvest of 1740, but this was not enough to halt the virulent epidemics that continued for another year, the spotted fever being worst in autumn and spring, dysentery during what was another frosty winter. From the evidence of several Church of Ireland registers, the period of very high mortality seems to have spanned about ten months from the early autumn of 1740 until the very plentiful 1741 harvest began to be saved.

Cork hearth-money returns suggest that a recovery in house numbers had already begun before 1748-9 (see Table 8:i). Certainly the harvest crisis of 1744-5, so severe in other parts of Ireland, is known not to have had any drastic effect on food supply; the potato crop survived, and


12. Purcell to Orrery, 16 Jan. 1740/1 Orrery MSS (loc. cit.); copies, [John Usher] to Sir William Abdy, 16 May, 25 July 1741, Lismore MSS (N.L.I. MS 7,179); Connell, Population of Ireland, p.225

13. Church of Ireland parish registers for Cloyne, Dungarvan and Macroom (P.R.O. M6,079; M5,056; M5,061).
grain imports in early 1745 were sufficient to meet summer demand.\(^14\)

The rate of house growth between mid-century and the 1821 census, over 1.5% p.a., might seem at first sight improbably high, a confirmation of Prof Connell's assertion that all hearth-money returns seriously understate the reality. However it is possible to test the plausibility of this rate of house growth by comparing it to that of family growth between 1766, the year of a comprehensive religious census, and 1821. The 1766 data were drawn up not by hearth-money officials, but by the Protestant clergy. Fortunately, the information on individual parishes, returned by them to Dublin (via their bishops) survives in unusual completeness for the Cork dioceses (see Table 8:iii).

The 1766 figures compared with the family data for 1821 indicate a growth rate of 1.5% p.a., and therefore parallel house growth very closely. This of course does not mean that the house returns of 1753 and earlier, or the 1766 religious returns, have census-level accuracy, but their mutual agreement does suggest that in an accessible county such as Cork, most districts of which were areas of old settlement, the degree of error in such enumerations was by no means as serious as Prof. Connell's revised national estimates of house numbers would imply.

It is possible that the rate of growth was constant over six decades but this is unlikely, if only because of the considerable internal

\(^{14}\) E.g. Purcell, Kanturk to Egmont, 30 April, 14 June 1745, Egmont MSS (B.L. Add. MS 47,010\(^*\), pp.121,145 |\(N.L.I.\) Mic. p4,679\]).
### TABLE 8:iii

Returns of families in Co. Cork parishes 1766-1821

<table>
<thead>
<tr>
<th>Barony+</th>
<th>No. of directly comparable parishes**</th>
<th>Families in 1766++</th>
<th>Families in 1821</th>
<th>Percentage Growth p.a. (compound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barretts</td>
<td>5</td>
<td>1,546</td>
<td>3,292</td>
<td>1.38</td>
</tr>
<tr>
<td>Barrymore</td>
<td>19</td>
<td>3,885</td>
<td>9,668</td>
<td>1.67</td>
</tr>
<tr>
<td>Bear</td>
<td>4</td>
<td>692</td>
<td>3,443</td>
<td>2.96</td>
</tr>
<tr>
<td>Carbery, East</td>
<td>13</td>
<td>5,569</td>
<td>13,518</td>
<td>1.625</td>
</tr>
<tr>
<td>Carbery, West and Bantry</td>
<td>12</td>
<td>4,998</td>
<td>12,265</td>
<td>1.65</td>
</tr>
<tr>
<td>Condons &amp; Clangibbons</td>
<td>8</td>
<td>2,188</td>
<td>4,329</td>
<td>1.25</td>
</tr>
<tr>
<td>Courceys &amp; Kinsale*</td>
<td>5</td>
<td>876</td>
<td>1,742</td>
<td>1.26</td>
</tr>
<tr>
<td>Duhallow</td>
<td>6</td>
<td>2,312</td>
<td>5,843</td>
<td>1.7</td>
</tr>
<tr>
<td>Fermoy</td>
<td>17</td>
<td>4,395</td>
<td>9,223</td>
<td>1.36</td>
</tr>
<tr>
<td>Ibane &amp; Barryroe</td>
<td>6</td>
<td>1,099</td>
<td>2,658</td>
<td>1.62</td>
</tr>
<tr>
<td>Imokilly**</td>
<td>7</td>
<td>1,977</td>
<td>4,362</td>
<td>1.45</td>
</tr>
<tr>
<td>Kerrycurrihy</td>
<td>6</td>
<td>1,224</td>
<td>2,588</td>
<td>1.37</td>
</tr>
<tr>
<td>Kinalmeaky</td>
<td>12</td>
<td>1,741</td>
<td>3,642</td>
<td>1.35</td>
</tr>
<tr>
<td>Kinatalloon</td>
<td>3</td>
<td>2,166</td>
<td>4,743</td>
<td>1.435</td>
</tr>
<tr>
<td>Muskerry, East</td>
<td>10</td>
<td>2,220</td>
<td>4,049</td>
<td>1.1</td>
</tr>
<tr>
<td>Muskerry, West</td>
<td>7</td>
<td>2,209</td>
<td>5,207</td>
<td>1.57</td>
</tr>
<tr>
<td>Orrery &amp; Kilmore</td>
<td>7</td>
<td>1,956</td>
<td>4,182</td>
<td>1.427</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>154</td>
<td>41,727</td>
<td>95,993</td>
<td>1.528</td>
</tr>
</tbody>
</table>

+ Where a civil parish is divided by baronial boundaries in the 1821 census, the various fractions have been allotted to the barony holding the largest part of the parish's families. ++ In a handful of parishes, 1766 family returns are not recorded, but in their place some surviving 1764 hearth-money returns have been used. * Excluding Kinsale town and Ringcurran and Scilly villages. ** Excluding Youghal (i.e. St. Mary's parish).

Sources: for transcripts of 1766 religious returns for Cloyne, Cork and Ross - P.R.O.I. M5,036; M4,921; for transcript of 1764-5 hearth-money returns for certain Cloyne parishes - M2475; for families in 1821 - Census of Ireland, 1821.
diversity shown in Table 8:iii. The house returns suggest a slight
fall in co. Cork's rate of growth after 1791 - of about one-sixteenth.
But the pattern in three baronies in the north of the county for which
local hearth-money returns happen to survive for 1788 points to a
slight acceleration in two baronies, and stability of growth in a third.

TABLE 8:iv

Constancy of family/house growth in north Cork 1766-1841

<table>
<thead>
<tr>
<th>Barony</th>
<th>No. of</th>
<th>1766 (families)</th>
<th>1788 (houses)</th>
<th>Percentage growth p.a. 1766-1788</th>
<th>1821 (houses)</th>
<th>Percentage growth p.a. 1788-1821</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condons &amp; Clan-</td>
<td>3</td>
<td>815</td>
<td>1,115</td>
<td>1.435</td>
<td>1,783</td>
<td>1.43</td>
</tr>
<tr>
<td>gibbonns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fermoy</td>
<td>11</td>
<td>2,229</td>
<td>2,952</td>
<td>1.285</td>
<td>4,552</td>
<td>1.32</td>
</tr>
<tr>
<td>Orrery &amp;</td>
<td>6</td>
<td>1,918</td>
<td>2,404</td>
<td>1.03</td>
<td>3,371</td>
<td>1.15</td>
</tr>
<tr>
<td>Kilmore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: for 1766 and 1821 returns see Table 8:iv; for 1788 - returns
for Mallow excise district, 1788 (P.R.O.I. 2B.105.22).

Arguably if the 1766 data had been in terms of houses rather than of
families, the growth-rate between then and 1788 might turn out to be
somewhat faster, bringing it into line with that after 1788. The twenty
parishes covered in the 1788 sample are drawn from baronies with slower
than average growth (to judge by Table 8:iii); such even growth patterns
were unlikely to have been the norm across the county. The way in which
the different farming districts evolved, described in Chapter V, increases
the probability that there were shifts in the rate of house expansion
as intensive agriculture spread inland and westwards. Positive or preventive
checks may have been slowing down the growth rate in densely settled
coastal districts without this being reflected in totals at county level;
their slower growth may have been more than compensated for elsewhere.

There is independent evidence for a general deceleration in co.
Cork's population in the years immediately prior to 1821. In 1811 Thomas
Newenham, using 'two very different methods of computation, grounded on different public documents' got a 'common result' for the population of co. Cork (including the city) of 675,364. Measured against the 1821 census, this would indicate a growth rate of 0.79% between those years. Pre-censal calculations are normally assumed to be underestimates; if that is the case here, very low population growth is implied. (Indeed the age composition of the segment of the 1821 population twenty years and under would tend to support this; it indicates a fall-back in the birth rate after 1816, or possibly a sharp surge in infant mortality.)

Newenham may of course have been working partly or completely from house returns, and by having to use an arbitrary conversion factor he may have exaggerated the population. The problem of relating house trends to aggregate population change before 1821 has always been complicated by the paucity of evidence on household and family size, and the probability that the size was increasing. Hence growth rates calculated from house or family counts may understate actual population expansion.

Two early estate surveys give widely differing ratios of households to inhabitants: in eleven parishes on the Petty estate in south Kerry in 1684 there was an average of 5.34 persons per family. On eleven townlands on the Perceval/Egmont estate (Cloyne diocese) in 1744, there was an average of 4.17 persons per house. Twenty-two years later, the Protestant clergy in over 113 parishes of Cork's dioceses as well as making returns of families, supplied a breakdown of Protestant and Catholic inhabitants as well. (There is little evidence of the population figures being rounded; they were probably enumerated by the collectors of parish cess.)

15. Wakefield, Account of Ireland, ii, p.601.
16. Census of Ireland, 1821.
17. 'An account of people, families, collops, areas of corn on W[illiam] P[etty's] concerns in Ireland an 1684', Lansdowne MSS, Bowood. (I am grateful to Dr. T. Barnard for a transcript of this document).
TABLE 8:v

Recorded family size, 1766 and 1821

<table>
<thead>
<tr>
<th>Year</th>
<th>Diocese</th>
<th>No. of parishes with full returns in 1766</th>
<th>Average family size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cloyne</td>
<td>17</td>
<td>4.50</td>
</tr>
<tr>
<td>1766</td>
<td>Cork</td>
<td>75 (Cork: excluding city parishes) (70)</td>
<td>5.55 (5.21)</td>
</tr>
<tr>
<td></td>
<td>Ross</td>
<td>21</td>
<td>4.89</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>113</td>
<td>5.23</td>
</tr>
<tr>
<td></td>
<td>Total excluding city parishes</td>
<td>108</td>
<td>5.00</td>
</tr>
<tr>
<td>1821</td>
<td>Co. Cork:excluding city and liberties</td>
<td></td>
<td>5.43</td>
</tr>
</tbody>
</table>

Sources: as in Table 8:iii

Thus average family size increased significantly between 1766 and 1821 so that the actual rate of population growth can be assumed to have been ahead of, not behind that of families. If one allows for this enlargement of family size, it follows that population in the 150 parishes included in Table 8:iii (excluding Bear) was growing by 1.6\% p.a. over the fifty-five years before 1821 as opposed to the 1.5\% family growth rate).

* * * * *

A sustained growth rate of 1.6\% p.a. - a doubling every forty-four years - would be unusual, perhaps even unique in the demography of the settled regions of eighteenth-century Europe. It would be less remarkable in a colonial context where a high level of immigration was a constant feature. But in fact both immigration and emigration were small and the balance was probably outward. After the end of the seventeenth century there was no statistically significant inflow, from England or any other area. Less than 500 Ulster artisan families can have been settled...
on a permanent basis between the 1720s and the 1770s. And inter-regional 'refuge' migration from districts where graziers displaced gneivers (such as Limerick and Tipperary) which may have been of some importance in the seventeenth century, was absent in the eighteenth century, and where engrossing was occurring (as in parts of lowland dairying areas of north Cork) displaced families seem to have only moved short distances. Similarly population pressure in particular districts - as along the Carbery coast - caused a spill-over into the nearest inland parishes only.

The absence of any migration from that area westwards into Kerry was noticeable even in the early nineteenth century.

Migration out of the region was somewhat more important. Between 1691 and the early 1750s the intermittent recruitment of men for the Irish Brigades absorbed an unknown number of young adults who never returned. But the era of regular foreign enlistment was also the time when Cork city was growing fastest; it can be safely assumed that such a proverbially unhealthy city would have been unable to maintain even a static population level, and that therefore all growth was achieved by immigration. At a conservative estimate, half of the new city-dwellers in the years between 1712 and 1725 came from co. Cork outside the liberties (i.e. from the area for which Cork house and family growth rates have been calculated). If this was so, the 'natural' house increase of the latter area could reasonably be adjusted upwards from 1.32% p.a. to 1.56%. The adjustment in the second half of the century would be smaller, for the city was growing more slowly; furthermore it was probably drawing on a wider hinterland for labour, with a greater proportion from Kerry in particular. From mid-century emigration to England may also have drained off a few permanently, and of the many who

19. Townsend, Cork, pp.199n, 310; Radcliff, Agriculture of Kerry, p.120.
joined the Newfoundland fishery from the east of the region, some presumably never came home. But migration to other parts of America, in spite of continuous local advertising in the last third of the century for indentured servants, seems to have been largely restricted to adventurers with some savings. Enlistment in the British navy and later the British army grew from the 1750s (as the exclusion of Catholics was gradually relaxed); recruitment however was mainly confined to the towns. Overall it would appear that even as late as 1810, out-migration from the region was remarkable only for its unimportance.

The rate of population growth must therefore have been a consequence of natural increase. As far as trends in mortality are concerned, the cataclysm in 1740-1 is the most obvious point of reference; no other eighteenth-century subsistence crisis in the region even distantly approached this disaster, in itself highly significant. In the first four decades the worst harvest had probably been that of 1708-9 when the rural poor were driven to widespread stealing, and the city became 'extremely oppressed with multitudes of poor'. It is unclear whether only the corn harvest failed then, but in subsequent years of national harvest difficulty, the most serious being 1728-9, potatoes did not suffer locally and sufficient grain was generally available for shipment northwards. But the events after the 'great frost' were quite different. At the time Sir Richard Cox reckoned its effects to be greater than any civil war or plague, and indeed other descriptions of the poor dying 'like rotten sheep' and remaining unburied in town streets and country highways were

22. Charles Northcote, Mallow to Sir John Perceval, 15 Feb. 1708/09 Egmont NSS (B.L. Add. MS 46,978* [N.L.I. Mic. p4,674]).
23. Christopher Crofts, Cork to Perceval, 27 Jan. 1709/10, Egmont MSS (B.L. Add. MS 46,978* [N.L.I. Mic. p4,674]).
24. Sir Richard Cox, Dunmanway to Walter Harris, - April 1741, Lodge MSS (Armagh Public Library).
quite foreign to a plague-free age. Cox believed half a century would be needed for the numbers lost to be made up, and all estimates emphasized the colossal mortality: at Lismore, on the other side of the region from Cox, the Earl of Burlington's agent as early as February 1741 thought that 'half our people are already dead', an estimate which he adjusted to 'near half' in May. At neighbouring Cappoquin in March it was said that 'the bloody flux which rages in all parts of the kingdom will in the opinion of many sweep away at least a third part of the lower and labouring people ...' In May a Cashel (Tipperary) pamphleteer estimated that a third of the 'poor cottiers' of Munster had indeed perished. But more than a year later, a correspondent at Kilmacow, some miles south of Lismore, was more conservative; 'in the last three years, we have lost at least a fourth part of our inhabitants ...'. To gauge the fall in house numbers, it is necessary to make an estimate for 1739 by projecting the growth of 1725-32 (very modest in the case of co. Cork) forward to that year; from that hypothetical peak, there was a fall in the co. Cork house total over the subsequent five years of 20.7%, in Kerry 41.4%. Smith, writing of the latter county in 1756, believed
from a comparison of the 1732 and 1744 figures that the population had certainly decreased by a third between 1739 and 1741. However, in November 1740, 'a great fall' in the Bandon hearth-money collector's receipts was not attributed specifically to mortality, but was 'owing to many people's going and begging and their houses waste and demolished etc'. Admittedly the heaviest mortality was subsequent to this comment, but the 1742 Kilmacow estimate quoted above, suggesting that a quarter of the population had been lost, explicitly included in the losses 'many who went to beg who have not as yet returned to their labour, and many (especially young men) ... gone overseas'.

Professor Drake has suggested a crude death rate of fifty to seventy per 1,000 of the mean population in both 1740 and 1741 for the whole country. If this is accepted in conjunction with the hearth-money indication that south Munster suffered disproportionate house losses, a higher regional mortality rate must be assumed. There is conflicting evidence from two extant Church of Ireland parish registers (chosen because they relate to areas outside the city and have large numbers of regular entries) - for Ballymodan (Bandon) and Macroom. Mortality in 1740 at the former was only 180% above the average burial rate for the non-crisis years between 1735 and 1746, and 246% in 1741. These rates would suggest mortality well below seventy per 1,000. But this Protestant congregation is not likely to have felt the full effects of what were malnutrition-based epidemics. The register for Macroom points to a grimmer situation, and it was a closer reflection of rural reality; at this period burials of all denominations in the parish seem to have included in the Church of Ireland register. Between 1726 and 1747 and excluding 1740

31. Smith, Kerry, p.77
32. Revenue Commissioners minutes, 17 Nov. 1740 (P.R.O. Customs/1/31).
33. Squire to Ward, 30 Nov. 1742.
34. Drake, 'Demographic crisis', p. 121.
35. Church of Ireland parish registers, Ballymodan (P.R.O.I. M6140; Mic. 30); Macroom (P.R.O.I. M5061).
and 1741, burials averaged 36.3 p.a. In 1740 they rose to 124 and in 1741 to 213, and were thus 342% and 587% above 'normal'. In 1766 the parish's population was returned as 2,475; if this approximated to the pre-1740 level, and if all those buried were resident in the parish, then the death-rate was about 50 per 1,000 and 90 per 1,000 in the crisis years. Perhaps Macroom parish being part urban was also untypical, but it is not clear whether towns would have attracted or repelled outsiders during the epidemic phase of the crisis. However, given that the 'normal' number of burials in this parish was 36.3% p.a. it is unlikely that its population in 1739 can have been as high even as 2,000, for otherwise the 'normal' years either side of 1740-1 were unusually healthy. If the 1766 figure is set aside and an average crude death rate of 25 per 1,000 is used as an alternative yardstick, then the Macroom rate in 1740 would have been 85 per 1,000 and 147 per 1,000 in 1741. This seems more plausible; the probability is that the excess mortality in the two years here as elsewhere in the region was closer to 20% of the mean population than 10%. And even if many houses were vacant for reasons other than death, the average size of remaining households probably fell; at least this is the implication of the very low household size on the Egmont estate in 1744 (4.17 persons).

From earlier discussion of wages and labour supply, it is clear that the economic impact of this crisis was of short duration. Real wages (i.e. wages in relation to cabin and garden rent) do not seem to have risen for any length of time, and complaints of the shortage of labourers were confined to the years immediately following. This was perhaps none too surprising in an economy where there was a high degree

36. Transcript of Cloyne diocesan census, 1766 (P.R.O.I. M5,036).
37. Egmont survey, 1744 (loc. cit).
of underemployment, but there was another possible reason. Mortality in 1740-1 was predominantly among adults in the country as a whole; this was presumably the pattern in south Munster as well. Thus even if as many as a fifth of the population died, its long-term effects on demographic growth may have been much less than would otherwise be expected.

The low growth of houses in Co. Cork between 1744 and 1752 - spanning a time of very noticeable economic expansion - followed by a resumption of higher growth after this period would tend to confirm that such was the case.

The crisis in the early forties stands out because it was so exceptional. It would appear that the adoption of the potato as the main winter food in the countryside, which had taken place by the second quarter of the century at latest, was responsible for reducing the impact of cereal harvest failures on the local food supply. Thus the potato in tandem with oats may have proved a more decisive factor in sustaining population growth than at a later period when its position in the rural diet was more exclusive.

There was however another factor that may have raised the level of mortality in the second quarter of the century. Smallpox, the great eighteenth-century child-killer, seems to have been particularly rife in south Munster in the late 1710s, at the beginning of the thirties and at several points in the 1740s. This was evidently part

38. The groans of Ireland in a letter to a member of parliament (Dublin 1741), p.4; J. Rutty, A chronological history of the weather and seasons, and of the prevailing diseases in Dublin (Dublin 1770); V. Morgan "A case study of population change over two centuries: Blaris, Lisburn 1661-1848," in Irish Economic and Social History, iii (1976) 11 figure ii.

of a wider national phenomenon, and it would seem that nutritional standards had at most only an indirect bearing on the prevalence and incidence of this disease. It continued of course to thin the child population for another generation after the 1740s, but outbreaks seem to have become more localized, if occasionally still very severe: at Ballymodan, Church of Ireland mortality in 1750 was only 10% lower (in absolute terms) than in 1741; the fact that nine-tenths of the deaths here were children points to the cause. From the 1740s inoculation against smallpox began to grow in popularity. One Dr. Creagh had successfully 'operated' on 300 by 1748. But it remained an expensive procedure until the late 1760s at the earliest, at which time the Sutton method was introduced in the region. Thereafter it became very widely diffused in the countryside, introduced by apothecaries, but taken out of their hands by itinerant inoculators. And although by later standards there was an unacceptably high reaction rate (about 1 in 500 among 'the poor' were estimated in 1800 to die after inoculation), vaccination in the early nineteenth century was very slow to replace a practice that had apparently


42. Ballymodan registers. Mortality rose only moderately in 1750 at Macroom.

43. Pearde, Castlelyons to Price, 2 Oct. 1748, Puleston MSS (N.L.W. MS 3579D [N.L.I. Mic. p3,263]).

transformed the survival rate of children in the countryside: there is no record of a major outbreak of smallpox in the region after 1776\(^45\), and half a century later only about 5% of all deaths in the province of Munster resulted from the disease.\(^46\)

The declining prevalence of smallpox took place in a period when there were hardly any rural subsistence crises. Between the late 'forties and 1799, years of high grain prices certainly caused hardship and occasionally triggered food riots in Cork, Bandon and other larger towns, but there was no year of disastrous potato failure (judging at least by the absence of positive comment in newspapers and estate correspondence). Frosty winters as in 1783/4 occasionally damaged the potato supply, but there was no potentially calamitous shortage until 1800/1, when a very defective crop together with low grain yields caused urban and to a lesser extent rural distress.\(^47\) A disastrous grain harvest tended to affect the countryside the following summer, but the hungry months were not, it seems, long enough to kindle widespread epidemics. Furthermore the regularity of grain imports eased prices in years of shortfall. Summer famine was thus averted in 1745, and after a number of bad harvests in the 1750s and 1760s. But the very poor yields in 1756, when 'the oldest man living scarce remembers so bad a harvest'\(^48\) were a prelude to a tense and sickly year following; at Macroom burials

\(^{45}\) J.M. Barry, An account of the nature and effects of the cow pock ... with a view to promote the extirpation of the small-pox (Cork, 1800) pp.27, 40-1, 44; Connell, Population of Ireland, p.210; Razzell, 'Population growth', p.273.

\(^{46}\) Connell, Population of Ireland, p.218.


\(^{49}\) See copy, Earl Grandison, Dromana to Aland Mason, 30 April, 1757, Villiers Stuart MSS C/11.
in 1757 were just under double the decennial average. The organization of relief at the time of the 1801 shortage was on an unprecedented scale, and rice and Indian meal joined imported grain for the first time; 30,000 were said to have received charity in the city alone. The accompanying epidemics were moderate, and the death rate was probably not raised by more than 50% above the average.

If rapid growth was characteristic of the first, third and fourth quarters of the century there is no compelling reason to suppose that there was any change in the probable underlying cause: a food supply that was reliable by pre-industrial standards. There is certainly no prima facie case for assuming any long-term rise in fertility; whatever the trends in the incidence of marriage, age of marriage among the majority of the population was always assumed to be fairly low. If the growth-rate was somewhat higher in the late eighteenth century, smallpox inoculation may well have been mainly responsible.

The only evidence on fertility at present available comes from the end of the period. Returns of baptisms together with the number of Catholic houses, were made by several dozen Catholic clergy in the region and returned to Newenham c. 1806-7. If six persons are allowed to a house (an assumption Newenham made and a reasonable estimate given the slightly higher 1821 average), their data gives a regional annual baptism rate of 41.4 per 1,000. This average is close to the most reliable diocesan return.

54. In 1821 the average inmates per house in co. Cork (outside the liberties) was 6.098 (Census of Ireland, 1821).
TABLE 8: vi

Catholic baptisms as a proportion of total congregations, c. 1806-7

<table>
<thead>
<tr>
<th>Diocese</th>
<th>No. of parishes (or groups of parishes)*</th>
<th>Baptisms per 1,000 in previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloyne</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>Cork</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td>Kerry (Ardfert)*</td>
<td>11</td>
<td>41</td>
</tr>
<tr>
<td>Lismore</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Ross</td>
<td>9</td>
<td>42</td>
</tr>
</tbody>
</table>

*House/population returns which are rounded to the nearest hundred have not been included. +Only those parishes in the study area, i.e. south and central Kerry, are included.


In the table above, that for Ross, where total congregation size as such was enumerated; (the low rates for Cloyne diocese are based on a very small sample with widely varying individual returns). By implication the crude birth rate (perhaps 5% to 10% greater than the record of baptisms) was therefore high; (by comparison, the 1841 enumerators estimated crude birth rate in the 1830s at 31 per 1,000 in Cork, 27.3 per 1,000 in Kerry, but these returns are most likely underestimates).

When the sustained rate of population growth is considered in conjunction with the 1806-7 fertility rates, and the youthfulness of the population in 1821 is borne in mind, the most plausible explanation of the region's demographic transformation is that a traditionally high birth-rate was accompanied by a fairly low death-rate over long periods of time. The rarity of subsistence crises in the eighteenth century does not mean that the general level of health was particularly satisfactory or that adult life expectancy was great, only that with one exception major reverses were absent.

But fertility changes must also be taken into the reckoning, at least in explaining contrasts within the region. A comparison of baronial growth performance between 1766 and 1821, with the age structure of their respective inhabitants in 1821 (Append. table vii) confirms that the rate...

of growth in most of the coastal baronies, the traditional tillage farming zone - Ibane and Barryroe, Imokilly, Kerrycurrihy, and Courceys - was slowing down, in contrast to the trend in the inland baronies of Muskerry and Barretts; it also suggests high-growth stability in Carbery, and low-growth stability in Kinnalaloon.\(^{56}\) The possibility of such divergent trends between the old settled coastal districts and other parts of the region can hardly be explained in terms of mortality. It is much more likely to have been a result of differential fertility; perhaps those in the areas of new settlement were marrying even younger than their forbears, but the chances are that it was changes in the marriage pattern in parishes where density of settlement had been longest evident that explain the divergence.

* * *

It has been argued in previous chapters that rural society evolved from a seventeenth-century colonial structure where social differentiation among native occupiers was limited, to one (in the more developed parts of the region) where the distinction between cattle-owning farmers and landless labourers became fundamental. The 1831 and 1841 censuses sought to distinguish between farmers and labourers; in the latter year farm servants and labourers were found to outnumber farmers by seven to three in co. Cork\(^{57}\). The nearest equivalent to this type of comprehensive categorization in the eighteenth century was the division of the hearth-money returns into single-hearth and multi-hearth houses. This was attempted in 1706 and 1791. It can be seen that they provide little confirmation of any striking alteration in the distribution of wealth, even allowing for the fact that under-recording in 1706 was more likely to have affected the return of one-hearth houses. But housing at the end

\(^{56}\) For an analysis of baronial trends based wholly on the data on age structure in the 1821, 1831 and 1841 censuses, see Burke, 'Population geography of Co. Cork', pp.119-30.

\(^{57}\) Donnelly, Nineteenth-century Cork, p.16.


<table>
<thead>
<tr>
<th></th>
<th>Houses with two or more hearths</th>
<th>Houses with one hearth</th>
<th>Exempt houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork (city and county) 1706</td>
<td>3,787 (10.9%)</td>
<td>30,918</td>
<td>-</td>
</tr>
<tr>
<td>1791</td>
<td>9,026 (12.1%)</td>
<td>56,422</td>
<td>8,949</td>
</tr>
<tr>
<td>Cork (excluding city and liberties) 1706</td>
<td>2,506 (8.3%)</td>
<td>27,597</td>
<td>-</td>
</tr>
<tr>
<td>1791</td>
<td>n.g.</td>
<td>n.g.</td>
<td>n.g.</td>
</tr>
<tr>
<td>Kerry 1706</td>
<td>490 (6.1%)</td>
<td>7,597</td>
<td>-</td>
</tr>
<tr>
<td>1791</td>
<td>1,060 (5.4%)</td>
<td>15,051</td>
<td>3,488</td>
</tr>
</tbody>
</table>

Sources: for 1706 - T.C.D. MS 883/2; for 1791 J.H.C.I. XV, cxcvii-ccii.

of the eighteenth century was a poor guide to relative income, and while the building of better farm houses was fairly widespread in the quarter-century after 1791, there was still criticism of farmers for living in squalid housing; in 1810 Townsend believed that their 'acquisition of riches seldom brings any material improvement with it'. Consumption patterns as a whole were misleading - there were very modest differences between midling farmers and labourers in the matter of diet, and even in clothing the greater purchasing power of farming families was slow to create noticeable distinctions.

As a result, the social landscape was deceptive. The 'peasantry' or 'the poor' might well appear to be the hugh, homogeneous majority to the casual observer.

A survey of one-hearth householders in 1792 was undertaken to determine how far payment of the two-shilling tax was a hardship. A fairly large sample of non-exempt households in each county was examined, and an estimate of annual value (i.e. net income) was made. This showed considerable variations across the country (from an average of £10.81 in co. Limerick to £3.53 in co. Sligo); Cork's sample of 8,510 houses averaged £9.33 (the

TABLE 8:vii

Valuation of Cork and Kerry households, 1791-2

<table>
<thead>
<tr>
<th>Description</th>
<th>Cork</th>
<th>Kerry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-hearth households valued at over £10 p.a.</td>
<td>36% (32.1%)</td>
<td>28.4% (24.1%)</td>
</tr>
<tr>
<td>One-hearth households valued at £6 - 10 p.a.</td>
<td>18% (16.1%)</td>
<td>20.6% (17.5%)</td>
</tr>
<tr>
<td>One-hearth households worth £5 or less p.a., and</td>
<td>46% (51.8%)</td>
<td>51% (58.4%)</td>
</tr>
<tr>
<td>exempted houses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: J.H.C.I. XV, cxcvii-ccxi; cccxxi-ii.

Note: Percentage values in brackets assume that 50% of the houses exempted from hearth tax in each county went unrecorded in 1791 (cf. Newenham, Circumstances of Ireland, append. p. 21); multi-hearth and exempted houses are treated for the purposes of this table as representing single family units.

third highest in the country), with Waterford and Kerry not far behind.

Accompanying the return was an interpretation of the figures by Thomas Wray, Inspector-General of hearthmoney. He grouped bound (i.e. regular) labourers, cottiers and tradesmen renting only one-acre holdings, with widows and the unemployed, at valuations from £1 to £4; he placed unbound labourers (together with various urban categories) in the £4 to £6 bracket, and 'labouring farmers', by implication gneevors, at £6 - £10; all households valued above £10 were potentially employers of labour. In table 8:viii an attempt is made to integrate the distribution of wealth suggested by this valuation with the categories that were excluded, i.e. households exempted from the hearth-tax, and the 1791 data on households possessing two or more hearths. (Households valued at £5 by Wray have been included in the poorest category in Table 8:viii in order to bring in a majority of those in the unbound labourer bracket). The rural situation in co. Cork is somewhat distorted by the inclusion of Cork city in these figures, but allowing for this and the possible eccentricities of eighteenth-century sampling techniques, it would seem that at least half the population by the 1790s were wage labourers, few of whom can have owned cattle, cultivated more than an acre and a half, or held a lease.
Many measures of social change and modernization are available for the mid- and late-nineteenth century that cannot with confidence be projected backwards more than a generation. The trends in urbanization, literacy and in the proportion of the population speaking English may all have been progressing in one direction since the early eighteenth century, yet with a rapidly expanding population, relative levels need not have changed greatly during the eighteenth century. The proportion in towns and villages for instance probably altered little between the 1720s and 1780s, but after that it grew steadily to reach the 1841 population (17.7% in co. Cork, 25.3% including the city)\textsuperscript{62}.

The changing denominational composition of the population can be reconstructed with greater certainty. Between the time of the 1732 religious survey and another carried out in 1772, recorded Protestant households in the province of Munster grew from 11.1% to 13.6% of the total; (figures for individual counties in 1772 do not survive)\textsuperscript{63}. The accuracy of the 1772 survey is suspect, but it is possible that conformity and Protestant immigration was sufficient to cause a slight rise in the Protestant proportion. In Cork outside the city, 10.9% of the families were returned as Protestant in 1732, in the diocesan surveys of 1766, 13.3% of the families in Cork diocese (excluding the city parishes) were Protestant, 8.1% in Ross diocese.\textsuperscript{64} After this time, the proportion of Protestants in the community almost certainly fell back somewhat. By 1825 in Ross diocese, Protestants formed only 6%.\textsuperscript{65} Cork city changed even more noticeably: in 1732 34.9% of the families in the city and liberties were recorded as Protestant.\textsuperscript{66} In 1766,\textsuperscript{66}

\textsuperscript{62} Burke, 'Population geography of co. Cork', p. 112.
\textsuperscript{63} Abstract of Protestant and Popish families, 1732 (Dublin, 1736); Mr Waller's state of the several houses and hearths in the Kingdom of Ireland 1772 (N.L.I. MS 9,003).
\textsuperscript{64} Transcript of Cork and Ross diocesan censuses, 1766, (P.R.O.I. M4,921).
\textsuperscript{65} Notes on returns of parish priests, Ross diocese, 1827, (in possession of Rev. J. Coombes, Courtmacsherry).
\textsuperscript{66} Abstract of Protestant and Popish families, 1732.
in five of the seven city parishes, 40.8% were Protestant (although the
two missing parishes, St. Anne's and St. Mary's Shandon probably had
very large Catholic majorities). 67 In the following forty years, during
which time the city grew by about half, the Protestant proportion fell,
according to Bishop MacCarthy's survey of 1806-8, to 18%. 68

There are a number of explanations for the relative decline in
Protestant numbers. Firstly their fertility seems to have been slightly
lower; in 1766 in the diocese of Cork, Protestant family size averaged
5.43 persons, Catholic families 5.58, while in Ross diocese the difference
was more marked, 4.45 for Protestants, 4.93 for Catholics. As Protestant
families had no doubt somewhat higher incomes on average, this differential
in family size is all the more striking. Secondly, there was a
degree of purely legal conformity during the operation of the Penal Laws,
the disappearance of which may have had some statistical significance on
relative numbers. Thirdly, insofar as a larger proportion of the Protestant
population was urban, their rates of emigration and enlistment may have been
relatively higher. Lastly, in spite of growing Protestant enthusiasm for
proselytizing exercises, the relative conversion rate seems to have favoured
Catholics whether because of the shortcomings of the Established Church's
clergy in the late eighteenth century, the counter activity of Catholic
priests 69, or the effects of mixed marriages which, according to Townsend
generally ended 'among the lower classes in the conversion of Protestants' 70.

*   *   *

67. Transcript of Cork diocesan census, 1766 (P.R.O.L. M4,921).
68. Wakefield, Account of Ireland, ii, p.601.
69. See Viscount Lonueville to [?], 3 June 1798, Rebellion papers
    (S.P.O. 620/4/38/1); Wakefield, Account of Ireland, ii, p.603.
Regional trends in per capita income must remain a matter of speculation. To judge by the pattern of reclamation, the stability of yields and the buoyancy of agricultural exports, the growth of output seems to have been greater than that of population for most of the eighteenth century, and it is unlikely that this was actually reversed before the 1810s. Technical improvements had played some part in this, the adoption of the potato into crop rotations being the most important in agriculture, the improvement of roads and the diffusion of the truckle being the most significant in transport, and (at different periods) the extended use of the spinning wheel and of water power technology, in industrial activities. But quite apart from possible changes in labour productivity, there are grounds for believing that there was a rise in labour inputs per family unit. Longer hours worked by the self-employed (whether farmer or craftsman) was probably one element of this. But a more important contribution came from the extended use of female and child labour in ancillary agricultural work and, more especially, in domestic industry. Thus 'idleness' was no longer picked out as the great impediment to social improvement in 1800 as once it had been. Broadly there are two ways of accounting for a greater work-effort in this context; it arose either from changing preferences in relation to material income and leisure, or from the growth of external demands in the form of rent. In practice both factors must have operated, albeit not in conjunction. Every independent farming family, for all their conservatism in diet, housing and clothing must have been affected to an extent by the increasing range and availability of consumption goods that came with an improved market network. And quite apart from the hoarding mentality - in relation to cattle, leasehold interests, guineas - seems to have been growing among farmers at the end of the century. But among labouring and other vulnerable families, the economic pressure caused by worsening real income as population growth began to have a malign effect, can only have led to increased family exertions, to greater 'self-exploitation' in effect.
Any decline in per capita growth towards the end of the period was masked by intra-regional contrasts and by the buoyancy of wartime prices. But the bitter downturn after 1815 starkly revealed the structural problems. Yet in the longer run, the events of subsequent decades were not the 'inevitable' legacies of the eighteenth century. Economic development had indeed transformed a backward, part-colonized society into a somewhat unstable, market-orientated community where the economic gains were very unevenly distributed. But in the early 1800s, the potential for further advance still remained; the commercial and industrial sectors had gained considerable momentum so that if, for example, coal had been present or had been discovered, local capital and local entrepreneurs could have carried the proto-industrialization of the 1790s and 1800s a stage further. Population growth as such was not the intractable problem some were to make out. There is a strong possibility that preventive checks were beginning to appear before 1815; if this was so, it formed the start of what was to be a protracted generation of adjustment, too protracted as the tragic final act was to show.
APPENDIX TABLES

I. Holding size and rent levels on Burlington estates 1690 - 1797
II. Holding size and rent levels on the Perceval - Egmont estate 1680-1809
III. Holding size and rent levels on the Brown - Kenmare estate 1720-59
IV. Holding size and rent levels on the Brodrick-Midleton estate 1750 -1814
V. Approximate median price of butter at Cork market
VI. Approximate median price of beef at Cork
VII. Age composition of Cork baronies in 1821 compared with family growth since 1766
VIII. Customs receipts 1699 - 1801
XI. Tonnage of shipping invoiced 1699 - 1801
X. Exports of butter 1683 - 1801
XI. Exports of beef 1683 - 1801
XII. Export of hides from Cork 1683 - 1801
XIII. Exports of pork from Cork 1683 - 1801
XIV. Grain exports 1701 - 1766
XV. Grain exports 1767 - 1799
XVI. (a) Inland and coastal movement of grain 1758 - 1797
      (b) Distribution of coastal exports to Dublin
XVII. Cork sugar imports
XVIII. Cork city wool, yarn, new draperies and frieze exports 1683 - 1801
XIX. Cork linen cloth exports 1683 - 1815
XX. Rent/output estimate for twelve farms on the Egmont estate 1744
XXI. Sources for wage and cabin-rent movement
XXII. Cork city population and houses
Holding Size and Rent Levels on

(a) BURLINGTON/DEVONSHIRE LISMORE - TALLOW ESTATE

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>No. of Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total rent (Irish)</th>
<th>Aver. rent per acre (Irish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1690-9</td>
<td>17,308</td>
<td>58</td>
<td>28,036</td>
<td>2,817.71</td>
<td>16.28</td>
</tr>
<tr>
<td>1700-9</td>
<td>2,525</td>
<td>7</td>
<td>4,090</td>
<td>413.87</td>
<td>16.39</td>
</tr>
<tr>
<td>1710-9</td>
<td>13,438</td>
<td>36</td>
<td>21,841</td>
<td>3,987.53</td>
<td>29.57</td>
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<tr>
<td>1720-9</td>
<td>11,222</td>
<td>43</td>
<td>18,177</td>
<td>3,557.12</td>
<td>31.70</td>
</tr>
<tr>
<td>1730-9</td>
<td>2,128</td>
<td>10</td>
<td>3,447</td>
<td>572.52</td>
<td>26.90</td>
</tr>
<tr>
<td>1740-9</td>
<td>7,184</td>
<td>31</td>
<td>11,636</td>
<td>1,986.56</td>
<td>27.65</td>
</tr>
<tr>
<td>1750-9</td>
<td>1,127</td>
<td>8</td>
<td>1,826</td>
<td>406.95</td>
<td>36.10</td>
</tr>
<tr>
<td>1760-9</td>
<td>2,600</td>
<td>14</td>
<td>4,211</td>
<td>1,140.36</td>
<td>43.86</td>
</tr>
<tr>
<td>1770-9</td>
<td>1,523</td>
<td>9</td>
<td>2,467</td>
<td>986.82</td>
<td>46.78</td>
</tr>
<tr>
<td>1780-9</td>
<td>4,651</td>
<td>18</td>
<td>7,534</td>
<td>2,431.21</td>
<td>52.27</td>
</tr>
<tr>
<td>1794-7</td>
<td>1,669</td>
<td>14</td>
<td>2,379</td>
<td>1,060.10</td>
<td>72.18</td>
</tr>
</tbody>
</table>

(b) BURLINGTON IMOKILLY ESTATE

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>No. of Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total rent (Irish)</th>
<th>Aver. rent per acre (Irish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1690-9</td>
<td>5,776</td>
<td>34</td>
<td>9,356</td>
<td>1,369.61</td>
<td>23.71</td>
</tr>
<tr>
<td>1700-9</td>
<td>834</td>
<td>4</td>
<td>1,351</td>
<td>125.87</td>
<td>15.01</td>
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<tr>
<td>1710-9</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1720-9</td>
<td>1,742</td>
<td>9</td>
<td>2,822</td>
<td>694.75</td>
<td>39.88</td>
</tr>
</tbody>
</table>

(c) BURLINGTON/DEVONSHIRE BANDON ESTATE

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>No. of Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total rent (Irish)</th>
<th>Aver. rent per acre (Irish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1690-9</td>
<td>6,614</td>
<td>16</td>
<td>10,714</td>
<td>1,032.53</td>
<td>15.61</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1710-9</td>
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<td>2,645</td>
<td>559.99</td>
<td>34.29</td>
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<tr>
<td>1720-9</td>
<td>3,779</td>
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<td>6,121</td>
<td>974.87</td>
<td>25.80</td>
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<td>-</td>
<td>-</td>
</tr>
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<td>1740-9</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1750-9</td>
<td>4,149</td>
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<td>6,721</td>
<td>1,800.84</td>
<td>28.46</td>
</tr>
<tr>
<td>1760-9</td>
<td>2,972</td>
<td>12</td>
<td>4,814</td>
<td>1,093.8</td>
<td>36.80</td>
</tr>
<tr>
<td>1770-9</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1780-9</td>
<td>1,702</td>
<td>7</td>
<td>2,756</td>
<td>937.55</td>
<td>55.09</td>
</tr>
<tr>
<td>1794-7</td>
<td>1,858</td>
<td>39</td>
<td>3,009</td>
<td>1,428.42</td>
<td>76.88</td>
</tr>
</tbody>
</table>

Sources: Lismore rentals, 1705, 1718, 1725, 1792-7 (N.L.I. MSS 6,396, 6,475, 6,477, 6,531, 6,660); schedule of leases executed, 1604-1767, 1718-51, 1719-1802, 1792-3 (N.L.I. MSS 6,179, 6,156, 6,177, 6,144).

Notes: One-year leases have been ignored. No lease of an urban tenement or land less than twenty-five acres part of which was urban has been included, nor have leases of mills with land attached (unless fifty acres (stat.) or more). Heriots have not been included in rent calculations, but allowance has been made for agents fees and other duties. Leases on which fines were taken (a general practice in the 1710s, 1720s and 1730s) have been incorporated; fines have been translated into their annuity value over the period of the lease, and the legal interest rate at the time of negotiation has been used in calculating the rent level. The annuity value of fines on three-leves leases has been worked out by assuming three lives leases to have lasted about thirty-one years (the conventional equation which probably somewhat understated the reality). Acreages have been based on...
## Appendix Table ii

### Holding Size and Rent Levels on THE PERCEVAL/EGMONT ESTATE 1680 - 1809

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>No. of Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total rent (Irish)</th>
<th>Aver. rent per acre (Irish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1680-6</td>
<td>17,994</td>
<td>29,147</td>
<td>45</td>
<td>647.72</td>
<td>12.93+</td>
</tr>
<tr>
<td>1700-9</td>
<td>8,522</td>
<td>13,804</td>
<td>23</td>
<td>600.18</td>
<td>1,289.62 15.13</td>
</tr>
<tr>
<td>1710-9</td>
<td>3,235</td>
<td>5,240</td>
<td>19</td>
<td>275.8</td>
<td>517.69 16.00</td>
</tr>
<tr>
<td>1720-9</td>
<td>9,402</td>
<td>15,230</td>
<td>31</td>
<td>491.28</td>
<td>2,664.78 28.34</td>
</tr>
<tr>
<td>1730-5</td>
<td>4,225</td>
<td>6,844</td>
<td>16</td>
<td>427.74</td>
<td>1,521.09 36.00</td>
</tr>
<tr>
<td>1740-9</td>
<td>7,024</td>
<td>11,378</td>
<td>39</td>
<td>291.74</td>
<td>2,145.15 30.54</td>
</tr>
<tr>
<td>1750-65</td>
<td>9,389</td>
<td>15,209</td>
<td>51</td>
<td>298.21</td>
<td>3,758.22 40.03</td>
</tr>
<tr>
<td>1770-9</td>
<td>1,123</td>
<td>1,820</td>
<td>8</td>
<td>227.49</td>
<td>1,113.63 99.12</td>
</tr>
<tr>
<td>1780-9</td>
<td>903</td>
<td>1,464</td>
<td>7</td>
<td>209.07</td>
<td>753.50 83.40</td>
</tr>
<tr>
<td>1790-9</td>
<td>2,688</td>
<td>4,355</td>
<td>19</td>
<td>229.21</td>
<td>3,461.84 128.76</td>
</tr>
<tr>
<td>1800-9</td>
<td>704</td>
<td>1,141</td>
<td>7</td>
<td>163.02</td>
<td>1,057.18 150.06</td>
</tr>
</tbody>
</table>

* These figures somewhat understate rent levels, as fines (of unknown quantity) were paid on some leases in the 1680s.

### Sources:
- Rental and details of settings on Perceval estate, 1686; rent roll for 1712; rent roll for 1729; observations on various Egmont leases, c.1748, c.1748; description and survey of the Egmont estate, c.1751, Egmont MSS (B.L. Add. MS 47,038*, 46,979*, 46,994*, 47,013*, 47,049*, N.I. Mic. p1,355, p4,674, p4,677, p4,680, p4,946); survey of the Perceval estate, c.1713 (R.I.A. MS 23.L.49); memorial of assignment, Edward LeGrand, the Earl of Egmont and others to Arthur Annesley, 29 May 1759 (Reg. of Deeds 202/15/137241); memorials of leases, Egmont and others to Spencer Crompton, 3 June 1760 (R.D. 205/484/137037; 206/522/137035); memorial of lease, Egmont to Lord Perceval, 3 June 1760 (R.D. 206/526/137039); memorial of lease and release, Egmont and others to John Longfield, 7-8 Oct. 1762 (R.D. 224/210/145512); memorial of lease and release, Egmont and others to Henry Wrixon, 26-7 Jan. 1763 (R.D. 217/430/145505); memorial of lease, Egmont to George Allen, 25 May 1765 (R.D. 239/104/156360); memorials of leases, Egmont and others to Lord Baron Boston, 3 June 1765 (R.D. 240/469/156420-4); rental and observations on the Egmont estate, 1822 (Cork Archives Council).

### Notes:
- Acreages are largely based on those given in the estate survey of 1702 (B.L. Add. MS 47,043* /N.I. Mic. p4,946). However there is no way of distinguishing between profitable and unprofitable acres. Urban and mill holdings have been ignored. Fees and duties have been included. A number of leases were set at graduated rents during the Spanish Succession war; rents however do not appear to have been adjusted upwards until 1716. Leases set 1750-65 cannot be dated precisely from the legal sources from which information on them is drawn. The drop in lettings in later years was because of extensive land sales from the 1750s. Some lease settings in the 1680s, and between 1750 and 1765, may have escaped notice.

* B.L. MS number before re-cataloguing of the Egmont MSS.
### Appendix Table iii

Holding Size and Rent Levels on

**BROWN/KENMARE KERRY ESTATE 1720-59**

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>Total acres let (stat.)</th>
<th>No. Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total nett-rent (Irish)</th>
<th>Total nett-rent (stat.)</th>
<th>Aver. rent per acre (Irish)</th>
<th>Aver. rent per acre (stat.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1720-9</td>
<td>5,808</td>
<td>9,408</td>
<td>23</td>
<td>409.04</td>
<td>708.20</td>
<td>12.19</td>
<td>5.53</td>
<td></td>
</tr>
<tr>
<td>1730-9</td>
<td>3,610</td>
<td>5,848</td>
<td>11</td>
<td>531.67</td>
<td>349.50</td>
<td>9.68</td>
<td>5.97</td>
<td></td>
</tr>
<tr>
<td>1740-9</td>
<td>2,959</td>
<td>4,794</td>
<td>21</td>
<td>228.28</td>
<td>589.64</td>
<td>19.92</td>
<td>12.3</td>
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<tr>
<td>1750-9</td>
<td>8,849</td>
<td>14,334</td>
<td>53</td>
<td>270.45</td>
<td>1,927.30</td>
<td>21.78</td>
<td>13.44</td>
<td></td>
</tr>
</tbody>
</table>

Source: E. MacLysaght, The Kenmare Manuscripts (I.M.C., 1942), passim.

Notes: No account has been taken of urban, near urban or mill leases, or of lettings where the date or denomination cannot be identified. Acreages are based on the 1721 survey of the estate; 'bog' and 'mountain' have been excluded.

### Appendix Table iv

Holding Size and Rent Levels on

**BRODRICK/MIDLETON ESTATE 1750 - 1814**

<table>
<thead>
<tr>
<th>Date</th>
<th>Total acres let (Irish)</th>
<th>Total acres let (stat.)</th>
<th>No. Lettings</th>
<th>Aver. holding size (stat.)</th>
<th>Total nett-rent (Irish)</th>
<th>Total nett-rent (stat.)</th>
<th>Aver. rent per acre (Irish)</th>
<th>Aver. rent per acre (stat.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750-9</td>
<td>2,738</td>
<td>4,435</td>
<td>5</td>
<td>887</td>
<td>655.38</td>
<td>23.9</td>
<td>14.7</td>
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</tr>
<tr>
<td>1760-9</td>
<td>283</td>
<td>460</td>
<td>3</td>
<td>153.33</td>
<td>195.94</td>
<td>69.0</td>
<td>42.5</td>
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</tr>
<tr>
<td>1770-9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1780-9</td>
<td>1,424</td>
<td>2,306½</td>
<td>10</td>
<td>230.65</td>
<td>1,021.63</td>
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<td>1790-9</td>
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<td>12</td>
<td>169.64</td>
<td>1,330.71</td>
<td>105.8</td>
<td>65.3</td>
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</tr>
<tr>
<td>1800-9</td>
<td>2,813</td>
<td>3,460</td>
<td>38</td>
<td>91.06</td>
<td>2,787.52</td>
<td>130.4</td>
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<td>1,112</td>
<td>1,801</td>
<td>26</td>
<td>69.28</td>
<td>1,828.19</td>
<td>164.4</td>
<td>101.4</td>
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</tr>
</tbody>
</table>

x This tabulates only those leases which had no expired in 1839

Source: Schedule of leases, 1839, Midleton MSS (P.R.O.I. M978/2/4/3).

Note: The Acreage as given in the schedule are used. Rural leases only have been included.
## APPROXIMATE MEDIAN PRICE OF BUTTER AT CORK MARKET

(cwt.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Price (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1697-99</td>
<td>1.42</td>
</tr>
<tr>
<td>1700-04</td>
<td>0.95+</td>
</tr>
<tr>
<td>1705-09</td>
<td>0.90</td>
</tr>
<tr>
<td>1710-14</td>
<td>1.28+</td>
</tr>
<tr>
<td>1715-19</td>
<td>1.20</td>
</tr>
<tr>
<td>1720-24</td>
<td>0.97</td>
</tr>
<tr>
<td>1725-29</td>
<td>1.12</td>
</tr>
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<td>1730-34</td>
<td>1.05</td>
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<tr>
<td>1735-39</td>
<td>1.08</td>
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<td>1740-44</td>
<td>1.27</td>
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<td>1745-49</td>
<td>1.36</td>
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<td>1750-54</td>
<td>1.34+</td>
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<tr>
<td>1755-59</td>
<td>1.28</td>
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<td>1760-64</td>
<td>1.45</td>
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<tr>
<td>1765-69</td>
<td>1.51</td>
</tr>
<tr>
<td>1770-74</td>
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<td>2.01</td>
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<tr>
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<td>2.03</td>
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<tr>
<td>1785-89</td>
<td>2.23</td>
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<tr>
<td>1790-94</td>
<td>2.73</td>
</tr>
<tr>
<td>1795-99</td>
<td>3.34</td>
</tr>
</tbody>
</table>

### Notes:

i. Most of these averages are based on recorded net prices paid to country suppliers at Cork for second-quality firkin butter.

ii. Where the symbol + appears after a quinquennial average, it indicates that for more than one of the years the only price data available comes from outside the region (gaps at the beginning of the century have been filled by using the national valuation of butter given in P.R.O. Customs/15).

### Sources:

Most local prices for the first half of the century have been taken from estate and merchants' correspondence; those from 1755 are mainly from Cork newspapers.

1. Systematic differentiation of grades only postdates 1769.
## Appendix table vi

**Approximate Median Price for Beef at Cork**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cwt. (to the country)</th>
<th>Barrels</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1698-99</td>
<td>- for 4½ cwt. beasts 1755-79</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>1700-04</td>
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* See note 2 to Table v.

Note: The problems in calculating beef prices are made particularly difficult by (a) the changing price relationship between ox/bullock and cow beef, (b) the changing average size of cattle (weight partly determining the price given to the grazier). Because of this the prices given here must be considered as no more than a tentative estimate of trends - rather than as a price series.

Sources: As in Table v.
**AGE COMPOSITION OF CORK BARONIES IN 1821**

**COMПARED WITH FAMILY GROWTH SINCE 1766***

<table>
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<tr>
<th>A - Rank by median age, 1821</th>
<th>Median age (years)</th>
<th>B - Rank by proportion of population under 40</th>
<th>C - Rank by family growth-rate 1766-1821</th>
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<td>6</td>
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<td>2 = Barretts</td>
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<tr>
<td>3 = Carbery West and Bantry</td>
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<td>5 = Kinalea</td>
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<td>7 = Muskerry East</td>
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<td>9 = Orrery &amp; Kilmore</td>
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* Bear has been excluded from this table because of the plainly unrealistic 1766 return for the barony. Its 1821 median age was 17.9.

**Sources:** As in Table 8:iii.
## Appendix Table viii

**CUSTOMS RECEIPTS 1699-1801**

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Sources for tables viii - xv and xvii - xix: P.R.O. Customs/15
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## Appendix Table x
### EXPORTS OF BUTTER (cwt.)

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## Appendix Table xi

### EXPORTS OF BEEF (Barrels)

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Appendix Table xiv
GRAIN EXPORTS 1701 - 1766 (3 year averages)

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<th>Oats (quarters)</th>
<th>Wheat (quarters)</th>
<th>Malt (quarters)</th>
<th>Oatmeal (quarters)</th>
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* Regional exports = total exports of Cork, Youghal, Kinsale, Baltimore and Dingle
### Appendix Table xv

**GRAIN EXPORTS 1767-1799 (3 year averages)**

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<th>Oats (quarters)*</th>
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<th>Flour (cwt)</th>
<th>Malt (qts)</th>
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+ Cork exports less imports
### Distribution of Coastal Exports to Dublin (%)

| Source for both | Male | oats | barley | Malt | Total
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### Co. Cork

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<td>5.2</td>
<td>17.9</td>
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### Inland and Coastal Movement of Grain 1788-1797 (3 year averages)

<table>
<thead>
<tr>
<th>Source for both</th>
<th>Male</th>
<th>oats</th>
<th>barley</th>
<th>Malt</th>
<th>Total</th>
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<tr>
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<tr>
<td>Bound from co. Cork to Dublin</td>
<td>2</td>
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<tr>
<td>Coasted</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Return after 1767</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Matl.</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(c) × (c) or (c) ×</td>
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### Co. Cork

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<th>Barley</th>
<th>Malt</th>
<th>Total</th>
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<td>5.2</td>
<td>17.9</td>
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<td>5.2</td>
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<td>14.9</td>
<td>2.1</td>
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<td>1783-84</td>
<td>14.9</td>
<td>2.1</td>
<td>5.2</td>
<td>17.9</td>
</tr>
<tr>
<td>1784-85</td>
<td>14.9</td>
<td>2.1</td>
<td>5.2</td>
<td>17.9</td>
</tr>
<tr>
<td>1785-86</td>
<td>14.9</td>
<td>2.1</td>
<td>5.2</td>
<td>17.9</td>
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<td>1786-87</td>
<td>14.9</td>
<td>2.1</td>
<td>5.2</td>
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<td>1787-88</td>
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<td>5.2</td>
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<td>1788-89</td>
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<td>2.1</td>
<td>5.2</td>
<td>17.9</td>
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<td>14.9</td>
<td>2.1</td>
<td>5.2</td>
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<td>2.1</td>
<td>5.2</td>
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<tr>
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<td>14.9</td>
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<td>1794-95</td>
<td>14.9</td>
<td>2.1</td>
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<td>1795-96</td>
<td>14.9</td>
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<td>2.1</td>
<td>5.2</td>
<td>17.9</td>
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</table>
## Appendix Table xvii

**CORK SUGAR IMPORTS**  
(cwt.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Muscavado</th>
<th>Refined</th>
<th>% of Muscavado from Continent or Plantations</th>
<th>% of Muscavado from Continent or Plantations</th>
<th>Local import of Muscavado as % of national import</th>
</tr>
</thead>
<tbody>
<tr>
<td>1683</td>
<td>2,309</td>
<td>43</td>
<td>100</td>
<td>100</td>
<td>41.2</td>
</tr>
<tr>
<td>1698</td>
<td>887*</td>
<td>136</td>
<td>0</td>
<td>0</td>
<td>14.5*</td>
</tr>
<tr>
<td>1710/1</td>
<td>6,053</td>
<td>12</td>
<td>22.8</td>
<td>-</td>
<td>37.6</td>
</tr>
<tr>
<td>1719/20</td>
<td>4,995</td>
<td>10</td>
<td>2.3</td>
<td>-</td>
<td>26</td>
</tr>
<tr>
<td>1730/1</td>
<td>10,765</td>
<td>80</td>
<td>25</td>
<td>-</td>
<td>26.9</td>
</tr>
<tr>
<td>1740/1</td>
<td>9,560</td>
<td>1,591</td>
<td>-</td>
<td>-</td>
<td>15.2</td>
</tr>
<tr>
<td>1747/8</td>
<td>1,847</td>
<td>1,167</td>
<td>-</td>
<td>-</td>
<td>3.6</td>
</tr>
<tr>
<td>1759/60</td>
<td>5,858</td>
<td>2,782</td>
<td>-</td>
<td>-</td>
<td>6.</td>
</tr>
<tr>
<td>1773/4</td>
<td>10,643</td>
<td>1,316</td>
<td>-</td>
<td>-</td>
<td>6.2</td>
</tr>
<tr>
<td>1783/4</td>
<td>25,158</td>
<td>1,012</td>
<td>80.6</td>
<td>-</td>
<td>13.4</td>
</tr>
<tr>
<td>1791/2-1793/4 (av.)</td>
<td>24,022</td>
<td>643</td>
<td>42.4</td>
<td>42.4</td>
<td>13.2</td>
</tr>
<tr>
<td>1801/2-1803/4 (av.)</td>
<td>44,352</td>
<td>2,609</td>
<td>51.3</td>
<td>51.3</td>
<td>14.3</td>
</tr>
<tr>
<td>1813/4</td>
<td>39,455</td>
<td>4,854</td>
<td>53.5</td>
<td>-</td>
<td>12.4</td>
</tr>
</tbody>
</table>

*At this time Kinsale was also importing sugar intermittently. The combined total in 1698 was 2,008 cwt. - 32.9% of national imports.*
## CORK CITY WOOL, YARN, NEW DRAPERIES AND FRIEZE EXPORTS 1683 - 1801

<table>
<thead>
<tr>
<th>Year</th>
<th>Wool (great stone)</th>
<th>Woollen yarn (g.s.)</th>
<th>Worsted yarn (g.s.)</th>
<th>New Draperies (pieces)</th>
<th>Frieze (yds.)</th>
</tr>
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<tbody>
<tr>
<td>1683</td>
<td>25,341</td>
<td>200</td>
<td></td>
<td>2,951</td>
<td>128,736</td>
</tr>
<tr>
<td>1684</td>
<td>25,188</td>
<td>1,173</td>
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<td>993</td>
<td>144,341</td>
</tr>
<tr>
<td>1685</td>
<td>11,811</td>
<td>713</td>
<td></td>
<td>2,695</td>
<td>225,924</td>
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<tr>
<td>1686</td>
<td>29,661</td>
<td>3,203</td>
<td></td>
<td>7,242</td>
<td>152,734</td>
</tr>
<tr>
<td>1687</td>
<td>n.g.</td>
<td>n.g.</td>
<td>n.g.</td>
<td>14,168</td>
<td>210,932</td>
</tr>
<tr>
<td>1688</td>
<td>26,043</td>
<td>6,736</td>
<td>12,963</td>
<td>8,714</td>
<td>191,848</td>
</tr>
<tr>
<td>1689</td>
<td>39,219</td>
<td>9,831</td>
<td>14,909</td>
<td>-</td>
<td>102,306</td>
</tr>
<tr>
<td>1690</td>
<td>21,792</td>
<td>10,298</td>
<td>12,486</td>
<td>-</td>
<td>101,260</td>
</tr>
<tr>
<td>1691</td>
<td>27,434</td>
<td>16,278</td>
<td>24,283</td>
<td>-</td>
<td>27,155</td>
</tr>
<tr>
<td>1692</td>
<td>n.g.</td>
<td>n.g.</td>
<td>n.g.</td>
<td>10,875</td>
<td>(29,622)*</td>
</tr>
<tr>
<td>1693</td>
<td>525</td>
<td>15,236</td>
<td>35,774</td>
<td></td>
<td>551</td>
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<tr>
<td>1694</td>
<td>388</td>
<td>39,579</td>
<td>77,863</td>
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<td>8,294</td>
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<tr>
<td>1695</td>
<td>87</td>
<td>19,024</td>
<td>47,566</td>
<td></td>
<td>6,713</td>
</tr>
<tr>
<td>1696</td>
<td>193</td>
<td>22,256</td>
<td>41,961</td>
<td></td>
<td>(5,259)</td>
</tr>
<tr>
<td>(1730)</td>
<td>293</td>
<td>15,029</td>
<td>29,364</td>
<td></td>
<td>(4,860)</td>
</tr>
<tr>
<td>1697</td>
<td>2,759</td>
<td>16,659</td>
<td>54,463</td>
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<tr>
<td>1698</td>
<td>1,624</td>
<td>26,248</td>
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<tr>
<td>1699</td>
<td>855</td>
<td>16,810</td>
<td>56,115</td>
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<tr>
<td>1700</td>
<td>616</td>
<td>8,550</td>
<td>54,459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1701</td>
<td>351</td>
<td>8,002</td>
<td>43,593</td>
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<td></td>
</tr>
<tr>
<td>1702</td>
<td>579</td>
<td>14,636</td>
<td>56,790</td>
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<tr>
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<td>3,518</td>
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<tr>
<td>1704</td>
<td>342</td>
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<td>1707</td>
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<td></td>
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<td>116,277</td>
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<td>1714</td>
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<td></td>
<td>4,698</td>
<td>61,600</td>
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</tr>
<tr>
<td>1715</td>
<td></td>
<td></td>
<td>15,748</td>
<td>10,300</td>
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</tr>
</tbody>
</table>

* 1698 ledger defective (national wool exports: 335,574 in 1698, 303629 in 1699; woollen yarn: 3,938 in 1698, 7,188 in 1699; worsted yarn: 12,849 in 1698, 15,748 in 1699).

+ Frieze exports for 1709/10. ** Year beginning 6 January.
Appendix Table xix

CORK LINEN CLOTH EXPORTS (Yards) 1683 - 1815

<table>
<thead>
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<th>Pieces</th>
<th>Yards</th>
</tr>
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<td>1683</td>
<td>1</td>
</tr>
<tr>
<td>1686</td>
<td>134</td>
</tr>
<tr>
<td>1699</td>
<td>657</td>
</tr>
<tr>
<td>1702</td>
<td>91½</td>
</tr>
<tr>
<td>1705</td>
<td>1,913</td>
</tr>
<tr>
<td>1708+</td>
<td>3,058</td>
</tr>
<tr>
<td>1711</td>
<td>16,875</td>
</tr>
<tr>
<td>1714</td>
<td>6,128</td>
</tr>
<tr>
<td>1717</td>
<td>9,138</td>
</tr>
<tr>
<td>1720</td>
<td>6,796</td>
</tr>
<tr>
<td>1723</td>
<td>25,979</td>
</tr>
<tr>
<td>1726</td>
<td>48,162</td>
</tr>
<tr>
<td>1729</td>
<td>45,648</td>
</tr>
<tr>
<td>1732</td>
<td>44,266*</td>
</tr>
<tr>
<td>1735</td>
<td>58,229</td>
</tr>
<tr>
<td>1738</td>
<td>140,129</td>
</tr>
<tr>
<td>1741</td>
<td>132,501</td>
</tr>
<tr>
<td>1744</td>
<td>117,600</td>
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<tr>
<td>1747</td>
<td>208,417</td>
</tr>
<tr>
<td>1750</td>
<td>185,544</td>
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<tr>
<td>1753</td>
<td>123,147</td>
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<tr>
<td>1756</td>
<td>225,727</td>
</tr>
<tr>
<td>1759</td>
<td>100,011</td>
</tr>
<tr>
<td>1762</td>
<td>103,170</td>
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<tr>
<td>1765</td>
<td>128,234</td>
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<td>1768</td>
<td>160,307</td>
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<td>1771</td>
<td>351,366</td>
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<td>1774</td>
<td>304,023</td>
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<td>283,318</td>
</tr>
<tr>
<td>1780</td>
<td>282,495</td>
</tr>
<tr>
<td>1783</td>
<td>387,150</td>
</tr>
<tr>
<td>1786</td>
<td>522,139</td>
</tr>
<tr>
<td>1789</td>
<td>669,991</td>
</tr>
<tr>
<td>1792</td>
<td>1,575,915</td>
</tr>
<tr>
<td>1795</td>
<td>1,931,265</td>
</tr>
<tr>
<td>1798</td>
<td>971,898</td>
</tr>
<tr>
<td>1801</td>
<td>1,731,888</td>
</tr>
<tr>
<td>1804</td>
<td>1,362,936</td>
</tr>
<tr>
<td>1807</td>
<td>1,443,181</td>
</tr>
<tr>
<td>1810</td>
<td>881,251</td>
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<tr>
<td>1813</td>
<td>1,232,113</td>
</tr>
<tr>
<td>1816</td>
<td>1,546,434</td>
</tr>
</tbody>
</table>

+ Year beginning 26 March from 1708
+ Exports from other ports in region were usually insignificant, but in 1729/30 16,423 yards shipped from ports to the west of Cork, in 1762/3 18,259 yards; in
### Appendix table xx

**RENT/OUTPUT ESTIMATE FOR TWELVE FARMS ON THE EGMONT ESTATE 1744**

Stock and crops surveyed (23 Oct 1744) **Approximate annual value (calculated on the basis of current market prices and contemporary yield assumptions)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>486 cows</td>
<td>£570</td>
</tr>
<tr>
<td>7 acres of wheat</td>
<td>£20</td>
</tr>
<tr>
<td>42 acres of barley</td>
<td>£100</td>
</tr>
<tr>
<td>10 acres of oats</td>
<td>£14</td>
</tr>
<tr>
<td>249 calves</td>
<td>£125</td>
</tr>
<tr>
<td>52 horses</td>
<td>£16</td>
</tr>
<tr>
<td>928 sheep</td>
<td>£125</td>
</tr>
<tr>
<td>90 pigs</td>
<td>£22</td>
</tr>
<tr>
<td>66½ acres of potatoes</td>
<td>£266</td>
</tr>
</tbody>
</table>

Rent payable on the twelve farms in 1744: **£509**

Rent/output ratio: 1:2.47

Source for survey: B.L.Add. MS 47,011A, ff.51-2

Note: certain wholly subsistence items such as sourmilk and turf are not taken into account here. The population on the farms surveyed was 293 according to the survey.
Appendix xxi

SOURCES FOR WAGE AND CABIN RENT MOVEMENT

(a) Wages


(b) Cabin and acre rents


Berkeley Taylor to Sir John Perceval, 8 Feb., 14 Feb. 1714/5, 8 June, 1725; William Taylor to Perceval, 6 June 1729; William Cooley to the Earl of Egmont, 30 Sept. 1748, Egmont MSS (B.L. Add. MSS 46, 980*, pp. 37, 43; 46, 990*, p. 101; 46, 994*, p. 125; 47, 013* [N.L.I. Mic. p 4, 675-7; 4, 680]).

### Appendix table xxii

CORK CITY POPULATION AND HOUSES: REVISED ESTIMATES

| Year | A - House total (city and liberties) | B - Houses in city and suburbs (1) as a percentage of A | No. of denizens per house | C - city (i.e. urban) population |
|------|-------------------------------------|------------------------------------------------------|---------------------------|---------------------------------
| 1659/64 | c. 1900 | 37 | c. 700 | 8.5 | 6000 |
| 1706 | 4602 | 45* | 2070* | 8.5* | 17595* |
| c. 1719 | 6340 | 50* | 3170* | 8.5* | 26945 |
| 1725 | 7536 | 55* | 4145* | 8.5* | 35232 |
| 1744 | 7366 | 60* | 4420* | 8.5* | 37570 |
| 1752 | 7625 | 60* | 4575* | 9* | 41175 |
| 1760 | 8268 | 60* | 4960* | 9* | 44640 |
| 1786 | 10340 | 56* | 5790* | 9* | 51840 |
| 1793 | 10610* | 56* | 6014 | 9.5* | 54126 |
| 1796 | | | 6337 | 9.5* | 57033 |
| 1821 | 11180 | 64 | 7170 approx. | 10 | 71500 approx. |
| 1841 | 12647 | 69 | 8773 | 9.2 | 80720 |

* Estimates

Sources for figures: 1659 - Pender, Census of Ireland, c. 1659; 1664 - Civil Survey, vi; 1706 - T.C.D. MS 883/2; c. 1719 - Marsh's Library, Dublin MS Z.3.1; 1725 - Dobbs, Essay on Trade; 1744, 1752 and 1760 - Watson's Almanacks; 1786 - Cork Evening Post, 14 Dec. 1786, 12 Feb. 1787; 1793 - An account of the number of dwelling-houses ... in the city of Cork and suburbs, as returned by the valuators appointed pursuant to the act of parliament ... (Cork 1793); 1796 - An account of the number of dwelling-houses ... in the city of Cork and suburbs ... (Cork, 1796); 1821 - Census of Ireland, 1821; 1841 - Census of Ireland, 1841.
I owe thanks to at least fifty people for various kinds of assistance over the course of the last seven years. Here it is only possible to record my greatest debts. Professor J.S. Donnelly (University of Wisconsin) was of great assistance, particularly at the beginning of my research, in passing on the results of his endeavours in pursuit of estate collections in private hands relating to co. Cork; the success of his own investigations into nineteenth-century Cork has been an inspiration and a challenge. In Cork itself, Padraig O Maidin, county librarian and secretary of the Cork Archives Council, has throughout my research facilitated me most generously and has been a heartening source of encouragement; Sean Bohan, city librarian, Anne Barry, county archivist, and Michael Mulcahy of the Kinsale Museum have also been most helpful. Many others who have been familiar with the Cork region far longer than I, have led me to local sources and discussed aspects of Cork and Munster history with me, in particular Father James Coombes, C.C. (Courtmacsherry), the Knight of Glin (Glin), C.P. Hyland (Wallstown), C.J.F. MacCarthy (Cork), John O'Brien (University College, Cork), Sean O Criadain (Dublin), Patrick O'Keefe (Bantry), and William O'Sullivan (Keeper of MSS, Trinity College Dublin).

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